

Hazard Mitigation Plan City of West Hollywood, California

**Adoption Date: August 16, 2004
Updated: January 20, 2005**

Primary Point of Contact

Public Safety Division
City of West Hollywood
8300 Santa Monica Boulevard
West Hollywood, CA 90069
323-848-6414

Prepared with:

Visual Risk
MITIGATIONPLAN.COM

Planning Team and Promulgation Authority

This Hazard Mitigation Plan for the City of West Hollywood was prepared by:

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Organization: City of West Hollywood - Finance

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Title: Senior Planner
Organization: City of West Hollywood - Planning

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Organization: City of West Hollywood - Building & Safety

Name: Chad Blouin
Title: Chair
Organization: Public Safety Commission

Name: Samuel Borelli
Title: Commissioner
Organization: Public Safety Commission

Name: Buck Buchanan
Title: Battalion Chief
Organization: Los Angeles County Fire Department

Name: Kristin Cook
Title: Emergency Services Specialist
Organization: City of West Hollywood - Public Safety

Name: Melissa Decker
Title: Previous Commissioner and Vice-Chair
Organization: Public Safety Commission

Name: Buddy Goldman
Title: Lieutenant
Organization: Los Angeles County Sheriff's Department

Name: Barry Greenfield
Title: Commissioner
Organization: Public Safety Commission

Name: Maria Grycan
Title: Community Services Representative
Organization: Los Angeles County Fire Department

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Organization: City of West Hollywood - Finance

Name: Susan Keene
Title: Planning Manager
Organization: City of West Hollywood - Planning

Name: Norma Kemper
Title: Commissioner
Organization: Public Safety Commission

Name: Sofia Komskaya
Title: Commissioner
Organization: Public Safety Commission

Name: David Long
Title: Captain
Organization: Los Angeles County Sheriff's Department

Name: Laura Manukian
Title: Neighborhood Services Specialist
Organization: City of West Hollywood - Public Safety

Name: Lauren Meister
Title: President
Organization: West Hollywood West Residents Association

Name: Richard Odenthal
Title: Public Safety Administrator
Organization: City of West Hollywood - Public Safety

Name: Richard Ryan
Title: Public Safety Specialist
Organization: City of West Hollywood - Public Safety

Name: Hilary Selvin
Title: Executive Director
Organization: West Hollywood Chamber of Commerce

Name: Ruth Williams
Title: Commissioner
Organization: Public Safety Commission

This Hazard Mitigation Plan for the City of West Hollywood was approved by the West Hollywood City Council on August 16, 2004,

by the following vote: 5-0.

MAYOR

ATTEST:

City Clerk

Please see "City Council Item and Resolution" in the Appendix.

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Section 1 – Introduction

1.1 General Description

Emergencies and disasters cause death or leave people injured or displaced, cause significant damage to our communities, businesses, public infrastructure and our environment, and cost tremendous amounts in terms of response and recovery dollars and economic loss.

Hazard mitigation reduces or eliminates losses of life and property. After disasters, repairs and reconstruction are often completed in such a way as to simply restore to pre-disaster conditions. Such efforts expedite a return to normalcy; however, the replication of pre-disaster conditions results in a cycle of damage, reconstruction, and repeated damage. Hazard mitigation ensures that such cycles are broken and that post-disaster repairs and reconstruction result in a reduction in hazard vulnerability.

While we cannot prevent disasters from happening, their effects can be reduced or eliminated through a well-organized public education and awareness effort, preparedness and mitigation. For those hazards which cannot be fully mitigated, the community must be prepared to provide efficient and effective response and recovery.

1.2 Purpose and Authority

The Disaster Mitigation Act of 2000 (DMA 2000), Section 322 (a-d) requires that local governments, as a condition of receiving federal disaster mitigation funds, have a mitigation plan that describes the process for identifying hazards, risks and vulnerabilities, identify and prioritize mitigation actions, encourage the development of local mitigation and provide technical support for those efforts. This mitigation plan serves to meet those requirements.

1.3 Community Information

The section is to provide a broad perspective, brief history and describes the makeup and development of the community.

1. Topography:

The City of West Hollywood is located along the southern edge of the Santa Monica Mountains, about 7 ½ miles northwest of downtown Los Angeles. The City is approximately 3 miles long in a west-east direction and ½ to 1 1/3 miles wide in a north-south direction.

The topography within the City is relatively flat and sloped to the south except at the extreme northern margin of the City, which is at the base of the mountains. The maximum elevation is about 500 feet and the minimum elevation is about 160 feet. The average downslope gradient from north to south, not including the base of the mountains, is about 6 percent in the

northern 1/3 of the City and about 2 percent in the southern 2/3 of the City.

West Hollywood is located largely on alluvial soil derived from the adjacent Santa Monica Mountains. The northernmost portion of the City is underlain by igneous and metamorphosed sedimentary bedrock. The alluvium consists of a mixture of sand, silt, clay, and gravel. The thickness of alluvium ranges from tens of feet in the vicinity of Sunset Boulevard to the north to hundreds of feet along the southern margin of the City.

Prior to development, a marsh existed within the alluvial plain currently incorporated as the City. The withdrawal of groundwater via pumping in the 1920's from the area contributed to the drying of the marsh. However, soft clays and organic-rich sediments were likely deposited along with sand and silt in this area while the marsh was present.

2. Climate:

The City of West Hollywood's climate is mild most of the year.

Season	Low Temperatures*	High Temperatures*
Winter (December – March)	High 40s	High 60s
Spring (April – June)	Low 50s	Mid 70s
Summer (June-August)	Mid 50s	High 80s
Autumn (September – December)	Mid 50s	Mid 70s

* Degrees in Fahrenheit:

3. Major River/Watersheds:

There are no rivers, lakes, or watersheds within the City of West Hollywood.

4. Population/Demographics:

Population

According to the 2000 Census, the City of West Hollywood's population is 35,716.

West Hollywood's population has remained relatively stable during the twenty years since its incorporation in 1984, with minor fluctuations of approximately 1%.

Race, Gender and Age

According to the 2000 Census, West Hollywood's racial composition is predominantly Caucasian (81%). Latinos represent 8%; Asians represent 4%

and African-Americans constitute 3% of the population respectively. One of the unique aspects of West Hollywood is the significant number of residents who are Russian-speaking (approximately 12%).

The City has a large Russian community with 15.6% of the residents reporting Russian as their primary ancestry in 1990. Residents of Hispanic origin were reported at 8.4% in 1990.

West Hollywood's male to female ratio is 1.12 to 1, according to the 1990 Census. That is slightly higher than the County ratio, which is almost 1 to 1.

The 2000 Census indicates that West Hollywood has an aging population; 87% of the residents were age 25 or older. Almost half of the population was adults age 25 to 44 with the largest portion, 26%, being age 25 to 34. The City's median age of 39 years old far exceeded the County median of 32 years old. The city had a very small population of youth with only 6% of the residents being age 19 or younger.

Education

West Hollywood is characterized as a well-educated City in the 1990 Census, with 66% of the residents age 25 or older attending college. About 25% stopped after receiving a Bachelor's Degree, while another 12% continued on to receive a Master's Degree. The City's average level of education completed is 13.7 years. Only 15% of the City's residents did not graduate from high school, compared to 30% of the County's residents.

Income

On average, residents of West Hollywood earned less income in 1990 than County residents. The average and median incomes of City residents were \$39,014 and \$29,314 respectively. The County average was \$47,252, while the median was \$34,965. The City's per capita income exceeded that of the County by \$8,237. The 1999 CACI-Information Decision Systems Market Profile Report indicates that West Hollywood resident's average income and per capita income each increased by 36% and median income increased by 24%. The County average income increased by 32% while the median income increased by 23% and the per capita income increased by 38%.

The residents of the Northwest Tract, 7005, have a higher average and median income than residents of the City's four other census tracts. Residents in the East Tract, 7001, have the lowest average (\$35,866), median (\$27,368) and per capita (\$19,392) income of all tracts. The average income of residents in tract 7005 is 93% greater than that of residents in tract 7001.

5. Economy:

The West Hollywood business community is an unusual and diverse blend of commercial venues.

The City of West Hollywood receives revenue from property taxes, sales and use taxes, transient occupancy taxes, business license taxes, parking fines, photo safety citations, parking meters, motor vehicle in lieu fees, and other funds.

6. Industry:

The businesses that populate West Hollywood are diverse. "Mom and Pop" stores co-exist with boutiques. Russian specialty stores and markets co-exist with posh hotels, popular avant-garde nightclubs, restaurants, florists, pet emporiums, and medical and legal professional services.

Santa Monica Boulevard is considered the City's main street and is home to neighborhood businesses, including those serving the Russian-speaking community, restaurants, bars, and markets. The City works collaboratively with the West Hollywood Convention and Visitors Bureau and the West Hollywood Chamber of Commerce to promote the City as a destination and to advocate for a community environment where businesses can flourish.

7. Land Use:

The development of West Hollywood reflects its transition from a workers' village for the railroad lines at the turn of the twentieth century to the increasingly dense urban village of today. Characterized by the adjacency of residential districts to main regional thoroughfares such as Sunset Boulevard and La Brea Avenue, the City's commercial buildings are frequently adjacent to residential neighbors. Development is made up of the variety of building types including low rise commercial structures and multifamily structures (generally 1-2 stories) and some 7-8 story apartments dating from the 1920-30's, of wood-frame are masonry construction. All masonry buildings have undergone a systematic retrofitting program to bring them into compliance with recent building codes.

Only a few residential buildings remain from the original turn-of-the-century community. Most of the City's single family homes and duplexes are small and date from the 1920s. Development in the 1950s particularly changed the scale of some sections of West Hollywood, placing larger apartment buildings in existing neighborhoods and office towers along the Sunset Strip.

Typical current private development includes demolition of older single family and duplex buildings, and construction of higher density low to midrise apartment and condominium buildings (2-4 stories). There are also a significant number of commercial remodeling projects along the City's commercial streets, although these typically are performed for aesthetic reasons and do not significantly increase building area or intensify existing uses.

Section 2 - Jurisdiction Information

2.1 Adoption by local governing body

<i>IFR REQUIREMENT</i> <i>§201.6(c)(5):</i>	[The local hazard mitigation plan shall include] documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan (e.g., City Council, County Commissioner, Tribal Council) ...
<i>Explanation:</i>	Adoption by the local governing body demonstrates the jurisdiction's commitment to fulfilling the mitigation goals and objectives outlined in the plan. Adoption legitimizes the plan and authorizes responsible agencies to execute their responsibilities. The plan must include a copy of the resolution adopting the plan.

Primary Point of Contact

The Point of Contact for information regarding this plan is:

Richard Odenthal
Public Safety Administrator
City of West Hollywood
8300 Santa Monica Boulevard
West Hollywood, CA 90069
323-848-6414 (Office)

Promulgation Authority Information

This Hazard Mitigation Plan was reviewed and approved by the City of West Hollywood City Council on August 16, 2004. The City Council also gave staff the authority to modify the plan as necessary.

2.2 Multi-Jurisdictional plan adoption

<i>IFR REQUIREMENT</i> <i>§201.6(c)(5):</i>	For multi-jurisdictional plans, each jurisdiction requesting approval of the plan must document that it has been formally adopted.
<i>Explanation:</i>	In order for multi-jurisdictional plans to be approved, each jurisdiction that is included in the plan must have its governing body adopt the plan before submission to the State and FEMA, even when a regional agency has the authority to prepare such plans in the name of the respective jurisdictions.

Not Applicable

Section 3 - Planning Process Documentation and Public Involvement

<p><i>IFR REQUIREMENT</i> <i>§201.6(c)(1):</i></p>	<p>[The plan must document] the planning process used to develop the plan, including how it was prepared, who was involved in the process and how the public was involved.</p>
<p><i>Explanation:</i></p>	<p>A description of the planning process could include how the plan was prepared, who was involved in the planning process, and the timeframe for preparing the plan. The plan should document how the planning team was formed and the number and outcomes of the meetings the planning team held. Ideally, the local mitigation planning team is composed of local, State, and federal agency representatives, as well as community representatives, local business leaders, and educators. In addition to the core team preparing the plan, it is also important to indicate how the public (residents, businesses, and other interested parties) participated, including what means (e.g., WebPages, storefronts, toll free phone lines, etc.) were made available to those who could not attend public forums to voice concerns or provide input during the planning process.</p>

3.1 Planning Team Member Information

A project coordinator, a core staff team, a planning team, and members of the public were identified to assist with the creation of the City's hazard mitigation plan. City departments involved in the planning process included Community Development (Building and Safety and Planning), Public Safety (Administrative, Los Angeles County Fire Department, Los Angeles County Sheriff's Department, and Commercial Code Enforcement), Rent Stabilization and Housing, Transportation (Public Works and Engineering), Human Services (Facilities/Landscape/Maintenance, Social Services, and Parks and Recreation), Economic Development, and Finance and Information Systems. The core staff team also met with each division in the City to survey their personnel to discuss past, current, and future mitigation activities. In addition, the coordinator collaborated with counterparts at other Disaster Management Area A cities (Beverly Hills, Culver City, and Santa Monica) to share information.

The planning team reviewed several existing City documents and policies to gather information for the plan. City documents reviewed included the City's Municipal Code, the Emergency Plan, the General Plan – including the Seismic Safety Element, Uniform Building Codes, critical facility lists, ordinances regarding natural hazards, utility maps, hazard maps, zoning districts, inundation maps, evacuation plans, and emergency notification plans. Other external resources utilized included maps,

history of California hazards, as well as other city and county hazard mitigation plans. Many of these materials are included in the attached Appendices.

This plan was compiled and authored by members of the following Planning Team:

John Adams

Accounting Services Manager

Description of Involvement: provided economic data input

Contact Information:

City of West Hollywood - Finance
8300 Santa Monica Boulevard
West Hollywood, CA 90069
323-848-6400 or jadams@weho.org

CJ Amstrup

Senior Planner

Description of Involvement: provided planning/community development input

Contact Information:

City of West Hollywood - Planning
8300 Santa Monica Boulevard
West Hollywood, CA 90069
323-848-6400 or camstrup@weho.org

Steve Bailey

Building and Safety Manager

Description of Involvement: provided building and safety/plans input

Contact Information:

City of West Hollywood - Building & Safety
8300 Santa Monica Boulevard
West Hollywood, CA 90069
323-848-6400 or sbailey@weho.org

Chad Blouin

Chair, Public Safety Commission

Description of Involvement: Public Safety Commissioner - provided community input

Contact Information:

Public Safety Commission c/o City Hall
8300 Santa Monica Boulevard
West Hollywood, CA 90069

Samuel Borelli

Commissioner

Description of Involvement: Public Safety Commissioner - provided community input

Contact Information:

Public Safety Commission c/o City Hall
8300 Santa Monica Boulevard
West Hollywood, CA 90069

Buck Buchanan
Battalion Chief

Description of Involvement: provided fire department/emergency management input

Contact Information:

Los Angeles County Fire Department
864 N. San Vicente Boulevard
West Hollywood, CA 90069
310-358-3435 or bbuchana@lacofd.org

Kristin Cook
Emergency Services Specialist

Description of Involvement: project coordinator

Contact Information:

City of West Hollywood - Public Safety
8300 Santa Monica Boulevard
West Hollywood, CA 90069
323-848-6492 or kcook@weho.org

Melissa Decker
Previous Vice-Chair

Description of Involvement: Public Safety Commissioner - provided community input

Contact Information:

Public Safety Commission c/o City Hall
8300 Santa Monica Boulevard
West Hollywood, CA 90069

Buddy Goldman
Lieutenant

Description of Involvement: provided law enforcement/emergency management input

Contact Information:

Los Angeles County Sheriff's Department
720 N. San Vicente Boulevard
West Hollywood, CA 90069
310-855-8850 or bgoldma@lasd.org

Barry Greenfield
Commissioner

Description of Involvement: Public Safety Commissioner - provided community input

Contact Information:

Public Safety Commission c/o City Hall
8300 Santa Monica Boulevard
West Hollywood, CA 90069

Maria Grycan
Community Services Representative

Description of Involvement: provided community/fire department input

Contact Information:

Los Angeles County Fire Department
3970 Carbon Canyon Road
Malibu, CA 90265
310-456-7923 or mgrycan@lacofd.org

David Hatcher
Revenue Officer

Description of Involvement: provided financial input

Contact Information:

City of West Hollywood - Finance
8300 Santa Monica Boulevard
West Hollywood, CA 90069
323-848-6400 or dhatcher@weho.org

Susan Keene
Planning Manager

Description of Involvement: provided planning/community development information

Contact Information:

City of West Hollywood - Planning
8300 Santa Monica Boulevard
West Hollywood, CA 90069
323-848-6400 or skeene@weho.org

Norma Kemper
Commissioner

Description of Involvement: Public Safety Commissioner - provided community input

Contact Information:

Public Safety Commission c/o City Hall
8300 Santa Monica Boulevard
West Hollywood, CA 90069

Sofia Komskaya
Commissioner

Description of Involvement: Public Safety Commissioner - provided community input (especially from the Russian speaking community)

Contact Information:

Public Safety Commission c/o City Hall
8300 Santa Monica Boulevard
West Hollywood, CA 90069

David Long
Captain

Description of Involvement: provided sheriff's department/emergency management input

Contact Information:

Los Angeles County Sheriff's Department
720 N. San Vicente Boulevard
West Hollywood, CA 90069
310-855-8850

Laura Manukian
Neighborhood Services Specialist

Description of Involvement: provided community input via Neighborhood Watch

Contact Information:

City of West Hollywood - Public Safety
8300 Santa Monica Boulevard
West Hollywood, CA 90069
323-848-6831 or lmanukian@weho.org

Lauren Meister

President – West Hollywood West Residents Association

Description of Involvement: provided community input

Contact Information:

337 Westbourne Drive
West Hollywood, CA 90048

Richard Odenthal

Public Safety Administrator

Description of Involvement: provided emergency management, public safety and commercial code compliance input

Contact Information:

City of West Hollywood - Public Safety
8300 Santa Monica Boulevard
West Hollywood, CA 90069
323-848-6414 or odie@weho.org

Richard Ryan

Public Safety Specialist

Description of Involvement: public safety staff/liaison to public safety commission

Contact Information:

City of West Hollywood - Public Safety
8300 Santa Monica Boulevard
West Hollywood, CA 90069
323-848-6414 or rryan@weho.org

Hilary Selvin

Executive Director

Description of Involvement: provided business community input by facilitating the distribution of the public survey to the business community

Contact Information:

West Hollywood Chamber of Commerce
8278 1/2 Santa Monica Boulevard
West Hollywood, CA 90069

Ruth Williams

Commissioner

Description of Involvement: Public Safety Commissioner - provided community input

Contact Information:

Public Safety Commission
c/c City Hall, 8300 Santa Monica Boulevard
West Hollywood, CA 90069

3.2 Multi-Jurisdictional Planning Team Information

Not Applicable

3.3 Public Involvement Items

The City of West Hollywood provided members of the public an opportunity to participate in the planning, design, and review phases of the hazard mitigation plan. Public input and discussion were possible during staff presentations and also during “public comment” at ten Public Safety Commission meetings. Staff provided information to citizens and business owners through neighborhood meetings, the Chamber of Commerce, newsletters, e-mails, the City’s cable TV stations, and the City’s website. Staff also conducted a city-wide web-based survey to ascertain public opinion. (Please see “Public Outreach Related Documents” in the Appendix for copies of meeting minutes, the web survey and results, and other outreach documents.) Finally, City staff met with neighboring jurisdictions to share information at Disaster Management Area A meetings, County Office of Emergency Management meetings, and meetings with colleagues in neighboring cities.

A summary of public involvement items follows (Please see appendices for associated files):

City Council Meeting and Public Comment - 8/16/2004

Description: City Council Approved Hazard Mitigation Plan.

Location: 647 N. San Vicente Boulevard, West Hollywood, CA 90069

Associated Files:

File Title: [City Council Meeting Agenda – 8/16/2004](#)

File Description: City Council Meeting Agenda from August 16, 2004.

File Title: [City Council Meeting Minutes - 8/16/2004](#)

File Description: City Council Meeting Minutes from August 16, 2004.

City Council Deputies Meeting - 8/11/2004

Description: Reviewed final copy of Hazard Mitigation Plan.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Public Safety Commission Meeting and Public Comment - 8/9/2004

Description: Reviewed final copy of Hazard Mitigation Plan.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Associated Files:

File Title: [PSC Meeting Agenda - 8/9/2004](#)

File Description: PSC Meeting Agenda from August 9, 2004.

File Title: [PSC Meeting Minutes - 8/9/2004](#)

File Description: PSC Meeting Minutes from August 9, 2004.

Public Safety Commission Meeting and Public Comment - 7/12/2004

Description: Reviewed final copy of Hazard Mitigation Plan.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Associated Files:

File Title: [PSC Meeting Agenda - 7/14/2004](#)

File Description: PSC Meeting Agenda from July 12, 2004.

File Title: [PSC Meeting Minutes - 6/14/2004](#)

File Description: PSC Meeting Minutes from July 12, 2004.

Public Safety Commission Meeting and Public Comment - 6/14/2004

Description: Reviewed draft of Local Hazard Mitigation Plan.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Associated Files:

File Title: [PSC Meeting Agenda - 6/14/2004](#)

File Description: PSC Meeting Agenda from June 14, 2004.

File Title: [PSC Meeting Minutes - 6/14/2004](#)

File Description: PSC Meeting Minutes from June 14, 2004.

Public Opinion Survey Meeting - 6/08/2004

Description: Discussed results of the web-based public opinion survey.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Associated Files:

File Title: [Disaster Mitigation Survey](#)

File Description: Executive summary, results, and copy of public opinion survey.

Core Planning Team Meeting - 6/3/2004

Description: Discussed and reviewed draft of Local Hazard Mitigation Plan.

Selected key directors and staff to review the plan during the month of June.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Staff Review of Internal Mitigation Strategies - 5/18/2004

Description: Review of previous weeks of staff meetings discussing employee mitigation strategies.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Associated Files:

File Title: [Staff Mitigation Strategies](#)

File Description: Summary of interviews and focus groups with various divisions and departments in the City of West Hollywood to discuss mitigation strategies.

Public Safety Commission Meeting and Public Comment - 5/10/2004

Description: Reviewed public opinion survey regarding natural hazards.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Associated Files:

File Title: [PSC Meeting Agenda - 5/10/2004](#)

File Description: PSC Meeting Agenda from May 10, 2004.

File Title: [PSC Meeting Minutes - 5/10/2004](#)

File Description: PSC Meeting Minutes from May 10, 2004.

Public Safety Commission Meeting and Public Comment - 4/12/2004

Description: Review of LHMP table of contents and outline.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Associated Files:

File Title: [PSC Meeting Agenda - 4/12/04](#)

File Description: PSC Meeting Agenda from April 12, 2004.

File Title: [PSC Meeting Minutes - 4/12/04](#)

File Description: PSC Meeting Minutes from April 12, 2004.

Core Planning Team Meeting - 3/23/2004

Description: The Core Planning Team met and discussed the capability assessment and reviewed the City's various building codes and plans.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

DMAC Meeting with County OEM - 3/22/2004

Description: The Disaster Management Area Coordinators met with representatives from the County of Los Angeles Office of Emergency Management representatives and their consultant regarding the collecting historical data for the various cities.

Location: 1275 N. Eastern Avenue, Los Angeles, CA 90063

Associated Files:

File Title: [County LHMP March Meeting Agenda](#)

File Description: Los Angeles County Local Hazard Mitigation Plan March meeting agenda.

Los Angeles County LHMP Working Group - 3/22/2004

Description: Reviewed hazard assessments, County resources, and maps.

Location: 1275 N. Eastern Avenue, Los Angeles, CA 90063

Engineering Staff Meeting - 3/18/2004

Description: Public Safety staff met with the City's Engineer to collect information regarding past, present, and future mitigation projects.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Core Planning Team Meeting - 3/16/2004

Description: Reviewed capabilities assessment.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Economic Development Staff Meeting - 3/15/2004

Description: Public Safety Staff met with Economic Development staff to discuss hazards and department mitigation efforts.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Web-based Survey Design Meeting - 3/12/2004

Description: A web-based survey will be conducted in the City of West Hollywood to gather public opinion on natural hazards and potential mitigation of these hazards. Initial survey design meeting was held with both survey and City staff.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Public Safety Commission Meeting and Public Comment- 3/8/2004

Description: Reviewed progress on the City's plan.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Associated Files:

File Title: [PSC Agenda - 3/8/2004](#)

File Description: PSC Meeting Agenda from March 8, 2004.

File Title: [PSC Meeting Minutes - 3/8/2004](#)

File Description: PSC Meeting Minutes from March 8, 2004.

Introductory MitigationPlan.com Training - 3/8/2004

Description: Visual Risk Training for all Disaster Management Area A cities regarding MitigationPlan.com.

Location: 455 Rexford Drive, Beverly Hills, CA 90210

Facilities, Landscape, & Street Maintenance Staff Meeting - 2/26/2004

Description: Public Safety staff met with Facilities, Landscape, and Street Maintenance staff to discuss hazards and division mitigation efforts.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Social Services Staff Meeting - 2/24/2004

Description: Public Safety staff met with Social Services staff to discuss hazards and division mitigation efforts.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Human Resources Staff Meeting - 2/12/2004

Description: Public Safety staff met with Human Resources staff to discuss hazards and division mitigation efforts.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Transportation Staff Meeting - 2/12/2004

Description: Public Safety Staff met with Transportation staff to discuss hazards and department mitigation efforts.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Recreation Staff Meeting - 2/10/2004

Description: Public Safety staff met with Recreation staff to discuss hazards and division mitigation efforts.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Engineering Staff Meeting - 2/9/2004

Description: Public Safety staff met with engineering staff to discuss hazards and Division mitigation efforts.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Rent Stabilization & Housing Staff Meeting - 2/5/2004

Description: Public Safety staff met with Rent Stabilization and Housing staff to discuss hazards and department mitigation efforts.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

City Clerk Staff Meeting - 2/3/2004

Description: Public Safety staff met with City Clerk staff to discuss hazards and department mitigation efforts.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Core Planning Team Meeting - 1/15/2004

Description: Discussed updates to LHMP.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Public Safety Commission Meeting and Public Comment- 1/12/2004

Description: Received a presentation from the Los Angeles County Office of Emergency Management regarding the County's LHMP and West Hollywood's role.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Associated Files:

File Title: [PSC Agenda - 1/12/2004](#)

File Description: PSC Meeting Agenda from January 12, 2004.

File Title: [PSC Meeting Minutes 1/12/2004](#)

File Description: PSC Meeting Minutes from January 12, 2004.

Neighborhood Watch Newsletter - 1/1/2004

Description: Article about LHMP sent to all Neighborhood Watch members, CERT members, and other key community volunteers.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Associated Files:

File Title: [WAB - January 2004](#)

File Description: "Watch Around the Block" Neighborhood Watch Quarterly Newsletter for January 2004. Newsletter contained an article about the Local Hazard Mitigation Plan which was sent to over 1200 Neighborhood Watch volunteers, CERT volunteers, and other community members.

Los Angeles County LHMP Working Group - 12/22/2003

Description: Introductory meeting with other County and City Agencies to solicit public input on the Los Angeles County LHMP.

Location: 1275 N. Eastern Avenue, Los Angeles, CA 90063

Associated Files:

File Title: [County LHMP December Minutes](#)

File Description: Los Angeles County Local Hazard Mitigation Plan December Meeting minutes.

Public Safety Commission Meeting and Public Comment - 12/8/2003

Description: Discussed LHMP/hazards specific to West Hollywood.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Associated Files:

File Title: [PSC Agenda - 12/8/03](#)

File Description: PSC Agenda for December 8, 2003.

File Title: [PSC Meeting Minutes - 12/8/2003](#)

File Description: PSC Meeting Minutes from December 8, 2003.

Core Planning Team Meeting - 11/18/2003

Description: Discussed updates to LHMP.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Public Safety Commission Meeting and Public Comment - 11/11/2003

Description: Discussed LHMP - hazards specific to West Hollywood.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Associated Files:

File Title: [PSC Agenda - 11/11/03](#)

File Description: PSC Agenda for November 11, 2003.

File Title: [PSC Meeting Minutes - 11/11/03](#)

File Description: PSC Meeting Minutes from November 11, 2003.

Public Safety Commission Meeting and Public Comment- 10/13/2003

Description: Introduced the plan to Commissioners and members of the public.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Associated Files:

File Title: [PSC Agenda - 10/11/03](#)

File Description: PSC Agenda for October 11, 2003.

File Title: [PSC Meeting Minutes - 10/13/03](#)

File Description: PSC Meeting Minutes from October 13, 2003.

Core Planning Team Meeting - 9/22/2003

Description: Discussed division of labor for LHMP.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Core Planning Team Meeting - 7/22/2003

Description: Discussed overview of LHMP.

Location: 8300 Santa Monica Boulevard, West Hollywood, CA 90069

Developing a LHMP Workshop (OES) - 6/5/2003

Description: The Governor's Office of Emergency Services conducted a workshop to assist California Local Governments to begin the planning process and documentation of required local plan content.

Location: 11703 Alameda Street, Lynwood, CA 90262

Section 4 - Risk Assessment

The goal of mitigation is to reduce the future impacts of a hazard including property damage, disruption to local and regional economies, and the amount of public and private funds spent to assist with recovery. However, mitigation should be based on risk assessment.

A risk assessment is measuring the potential loss from a hazard event by assessing the vulnerability of buildings, infrastructure and people. It identifies the characteristics and potential consequences of hazards, how much of the community could be affected by a hazard, and the impact on community assets. A risk assessment consists of three components: hazard identification, vulnerability analysis and risk analysis. Technically, these are three different items, but the terms are sometimes used interchangeably.

4.1 Hazard Identification

<p><i>IFR REQUIREMENT</i> §201.6(c)(2)(i):</p>	<p>[The risk assessment shall include a] description of the type ... of all] natural hazards that can affect the jurisdiction ...</p>
<p><i>Explanation:</i></p>	<p>The local risk assessment should identify what hazards are likely to affect the area. The plan should describe the sources used to identify hazards, noting any data limitations, and provide an explanation for eliminating any hazards from consideration. The process for identifying hazards could involve one or more of the following: - Reviewing reports, plans, flood ordinances and land use regulations among others; - Talking to experts from federal, State, and local agencies and universities; - Searching the Internet and newspapers; and - Interviewing long-time residents.</p>

While the City of West Hollywood is only 1.9 square miles, there are many hazards that might affect the community. The core planning team met with various departments, most notably including law enforcement, fire, planning, building and safety, transportation and public works, and members of the public to identify the hazards most likely to impact the West Hollywood community. Sources used to identify hazards included examining past history of Southern California disasters, the City's General Plan, the City's Emergency Plan, hazard websites, the State of California Hazard Mitigation Office, as well as building and safety and planning materials. A list of California Disasters since 1950 is included in the attached Appendix. The assessment of risk is limited to the source documents cited, existing personnel's knowledge, and a short history of the City's existence (West Hollywood incorporated 1984). A composite hazards map of the City is located in the Appendix.

Hazards identified by the core planning group and the public include dam failure, earthquake, extreme heat, flooding, winds, landslides, fire, energy emergencies, drought, and storms. Results from a public opinion survey indicated that members of the public are most concerned with earthquakes and their potential impact on their community. (Please see “Public Opinion Survey and Results” in the Public Outreach Related Documents section of the Appendix.) Each hazard will be detailed in the following section, except drought and storms which will be included in the extreme heat and flash flooding sections respectively.

In order to rate the impact of each hazard identified the core planning team utilized a ranking system, Critical Priority Risk Index. The Critical Priority Risk Index (CPRI) factors the elements of risk: Probability (P), Magnitude/Severity (M), Warning Time (WT) and Duration to create an index which allows for the prioritization of mitigation activities based on the level of risk. CPRI uses a mathematic equation and user defined information to establish a ranking for each hazard that affects a community. For each of the four criteria in the CPRI, there are four options from which to choose. Each of the four options represents a value of 0, 1, 2, 3, or 4. Zero is the value taken when an option is not assigned. Based on these four selections, the CPRI is calculated with the following weightings for each of the following criteria, Probability (P) weighted for 45%; Magnitude/Severity (M) for 30%; Warning Time (T) for 15%; and Duration (D) for 10%. This results in the following index calculation: $.45P + .3M + .15T + .1D = \text{CPRI}$. The CPRI is subjective in nature since it is based on the selection of options from four criteria. This ranking was used by the planning team appropriately in the discussion about hazard rankings.

The following table represents the Critical Priority Risk Index for each hazard facing the community.

Hazard	Geographic Area Affected**	Probability	Magnitude/Severity	Warning Time	Duration	Priority Risk Index
Dam Failure	eastern portion or the SW corner of the City	Unlikely	Limited	Less 6 Hours	Less than one day	1.85
Earthquake	The entire 1.9 sq. miles of the City	Likely	Critical	Less 6 Hours	Less than 6 hours	2.95
Extreme Heat/Drought	The entire 1.9 sq. miles of the City	Possible	Limited	24+ Hours	More than one week	2.05
Flooding	Small portion of the west side of the City is vulnerable to a 100 year flood	Possible	Limited	12-24 Hours	Less than one week	2.1
High Winds/Straight Line Winds	The entire 1.9 sq. miles of the City	High Likely	Limited	12-24 Hours	Less than one week	3
Landslide	The northern portion of the City	Possible	Limited	Less 6 Hours	Less than 6 hours	2.2
Wildfires	The northern portion of the City	Possible	Critical	Less 6 Hours	Less than one day	2.6
Energy Emergency	The entire 1.9 sq. miles of the City	Likely	Limited	6-12 Hours	Less than 6 hours	2.5
Flash Flooding/Storms	The northern portion of the City is most vulnerable	Possible	Limited	6-12 Hours	Less than 6 hours	2.05

**The City of West Hollywood is only 1.9 square miles. Most hazards can affect the entire City since it is such a small geographic area. Please see the appropriate Appendix for hazard maps.

Hazards with defined geographic areas of risk	Hazards without defined geographic areas of risk
Dam Failure	Earthquake
Flooding	Extreme Heat/Drought
Landslide	High Winds/Straight Line Winds
Wildfires	Energy Emergency
Flash Flooding/Storms	

The following is a list of hazards/threats confronting the City of West Hollywood. Please see the attached appendices for hazard maps and other detailed documents.

Natural Hazards

1. Dam Failure

General Definition:

A dam is defined as a barrier constructed across a watercourse for the purpose of storage, control, or diversion of water. Dams typically are constructed of earth, rock, concrete, or mine tailings. A dam failure is the collapse, breach, or other failure resulting in downstream flooding.

A dam impounds water in the upstream area, referred to as the reservoir. The amount of water impounded is measured in acre-feet. An acre-foot is the volume of water that covers an acre of land to a depth of one foot. As a function of upstream topography, even a very small dam may impound or detain many acre-feet of water. Two factors influence the potential severity of a full or partial dam failure: the amount of water impounded, and the density, type, and value of development and infrastructure located downstream.

Of the approximately 80,000 dams identified in the National Inventory of Dams, the majority are privately owned, Federal agencies own 2,131; States own 3, 627; local agencies own 12,078; public utilities own 1,626; and private entities or individuals own 43,656. Ownership of over 15,000 is undetermined. The Inventory categorizes the dams according primary function:

Recreation (31.3 percent), Fire and farm ponds (17.0 percent), Flood control (14.6 percent), Irrigation (13.7 percent), Water supply (9.8 percent), Tailings and other (8.1 percent), Hydroelectric (2.9 percent), Undetermined (2.3 percent) and Navigation (0.3 percent).

Each dam in the inventory is assigned a downstream hazard classification based on the potential loss of life and damage to property should the dam fail. The three classifications are high, significant and low. With changing

demographics and land development in downstream areas, hazard classifications are updated continually.

The hazard classification is not an indicator of the adequacy of a dam or its physical integrity. Dam failures typically occur when spillway capacity is inadequate and excess flow overtops the dam, or when internal erosion (piping) through the dam or foundation occurs.

Dam failures can result from any one or a combination of the following causes:

- Prolonged periods of rainfall and flooding, which causes most failures; Inadequate spillway capacity, resulting in excess overtopping flows;
- Internal erosion caused by embankment or foundation leakage or piping;
- Improper maintenance, including failure to remove trees, repair internal seepage problems, replace lost material from the cross section of the dam and abutments;
- Improper design, including the use of improper construction materials and construction practices;
- Negligent operation, including failure to remove or open gates or valves during high flow periods;
- Failure of upstream dams on the same waterway;
- Landslides into reservoirs, which cause surges that result in overtopping;
- High winds, which can cause significant wave action and result in substantial erosion; and
- Earthquakes, which typically cause longitudinal cracks at the tops of embankments that weaken entire structures.

Description:

No major dams and open reservoirs exist in the mountains upstream of the City. However, the Hollywood Reservoir exists to the east of the City, and Franklin Dam exists to the west of the City. A dam break at either of these locations would likely inundate a portion of the City. For the Hollywood Reservoir, the inundation area on the east side of the City might extend as far west as Gardner Street. (Please see "West Hollywood Zoning Districts" in the Appendix for a street map.)

A few steel reservoir tanks exist in the mountains upslope of the City. Failure of one of these tanks could potentially adversely impact property downslope. For example, a failure of the tank at Greystone Park would inundate a portion of the southwest corner of the City.

2. Earthquake

General Definition:

An earthquake is a sudden, rapid shaking of the Earth caused by the breaking and shifting of rock beneath the Earth's surface. For hundreds of millions of years, the forces of plate tectonics have shaped the Earth as the huge plates that form the Earth's surface move slowly over, under, and past each other. Sometimes the movement is gradual. At other times, the plates are locked together, unable to release the accumulating energy. When the accumulated energy grows strong enough, the plates break free causing the ground to shake. Most earthquakes occur at the boundaries where the plates meet; however, some earthquakes occur in the middle of plates.

Ground shaking from earthquakes can collapse buildings and bridges; disrupt gas, electric, and phone service; and sometimes trigger landslides, avalanches, flash floods, fires, and huge, destructive ocean waves (tsunamis). Buildings with foundations resting on unconsolidated landfill and other unstable soil, and trailers and homes not tied to their foundations are at risk because they can be shaken off their mountings during an earthquake. When an earthquake occurs in a populated area, it may cause deaths and injuries and extensive property damage.

Earthquakes strike suddenly, without warning. Earthquakes can occur at any time of the year and at any time of the day or night. On a yearly basis, 70 to 75 damaging earthquakes occur throughout the world. Estimates of losses from a future earthquake in the United States approach \$200 billion.

There are 45 states and territories in the United States at moderate to very high risk from earthquakes, and they are located in every region of the country. California experiences the most frequent damaging earthquakes; however, Alaska experiences the greatest number of large earthquakes—most located in uninhabited areas. The largest earthquakes felt in the United States were along the New Madrid Fault in Missouri, where a three-month long series of quakes from 1811 to 1812 included three quakes larger than a magnitude of 8 on the Richter Scale. These earthquakes were felt over the entire Eastern United States, with Missouri, Tennessee, Kentucky, Indiana, Illinois, Ohio, Alabama, Arkansas, and Mississippi experiencing the strongest ground shaking.

Description:

Historical and geological records show that California has a long history of seismic events. Southern California is probably best known for the San Andreas Fault, a 400 mile long fault running from the Mexican border to a point offshore, west of San Francisco. "Geologic studies show that over the past 1,400 to 1,500 years large earthquakes have occurred at about 130 year intervals on the southern San Andreas Fault. As the last large earthquake on the southern San Andreas occurred in 1857, that section of the fault is considered a likely location for an earthquake within the next few decades." (<http://pubs.usgs.gov/gip/earthq3/when.html>)

But San Andreas is only one of dozens of known earthquake faults that criss-

cross Southern California. Some of the better known faults include the Newport-Inglewood, Whittier, Chatsworth, Elsinore, Hollywood, Los Alamitos, and Palos Verdes faults. Beyond the known faults, there are a potentially large number of "blind" faults that underlie the surface of Southern California. One such blind fault was involved in the Whittier Narrows earthquake in October 1987.

Although the most famous of the faults, the San Andreas, is capable of producing an earthquake with a magnitude of 8+ on the Richter scale, some of the "lesser" faults have the potential to inflict greater damage on the urban core of the Los Angeles Basin. Seismologists believe that a 6.0 earthquake on the Newport-Inglewood would result in far more damage than a "great" quake on the San Andreas, because the San Andreas is relatively remote from the urban centers of Southern California.

For decades, partnerships have flourished between the USGS, Cal Tech, the California Geological Survey and universities to share research and educational efforts with Californians. Tremendous earthquake mapping and mitigation efforts have been made in California in the past two decades, and public awareness has risen remarkably during this time. Major federal, state, and local government agencies and private organizations support earthquake risk reduction, and have made significant contributions in reducing the adverse impacts of earthquakes. (Excerpt written by Mike Martinet, Disaster Management Area G)

West Hollywood is located in a complex geologic and seismic setting. Numerous major faults occur in the surrounding region that could produce strong ground shaking. Please see "Earthquake Related Documents" in the Appendix for fault and liquefaction maps. Limitations to predicting damage from an earthquake to the City specifically include not being able to identify with certainty which fault might be affected, the magnitude of the earthquake, or the length of time of the shaking. Comparisons can be drawn from history and geologic studies and are addressed in the City's Seismic Safety Element. (Please see "Seismic Safety Element" in the Appendix).

Southern California Region Earthquakes with a Magnitude 5.0 or Greater:

1769	Los Angeles Basin	1916	Tejon Pass Region
1800	San Diego Region	1918	San Jacinto
1812	Wrightwood	1923	San Bernardino Region
1812	Santa Barbara Channel	1925	Santa Barbara
1827	Los Angeles Region	1933	Long Beach
1855	Los Angeles Region	1941	Carpenteria
1857	Great Fort Tejon Earthquake	1952	Kern County
1858	San Bernardino Region	1954	W. of Wheeler Ridge
1862	San Diego Region	1971	San Fernando
1892	San Jacinto or Elsinore Fault	1973	Point Mugu
1893	Pico Canyon	1986	North Palm Springs
1894	Lytle Creek Region	1987	Whittier Narrows
1894	E. of San Diego	1992	Landers
1899	Lytle Creek Region	1992	Big Bear
1899	San Jacinto and Hemet	1994	Northridge
1907	San Bernardino Region	1999	Hector Mine
1910	Glen Ivy Hot Springs		

Source:

http://geology.about.com/gi/dynamic/offsite.htm?site=http%3A%2F%2Fpasadena.wr.usgs.gov%2Finfo%2Fcahist_eqs.html

Partial List of the Over 200 California Laws on Earthquake Safety

- Government Code Section 8870-8870.95
Creates Seismic Safety Commission.
- Government Code Section 8876.1-8876.10
Established the California Center for Earthquake Engineering Research.
- Public Resources Code Section 2800-2804.6
Authorized a prototype earthquake prediction system along the central San Andreas fault near the City of Parkfield.
- Public Resources Code Section 2810-2815
Continued the Southern California Earthquake Preparedness Project and the Bay Area Regional Earthquake Preparedness Project.

- Health and Safety Code Section 16100-16110
The Seismic Safety Commission and State Architect, will develop a state policy on acceptable levels of earthquake risk for new and existing state-owned buildings.
- Government Code Section 8871-8871.5
Established the California Earthquake Hazards Reduction Act of 1986.
- Health and Safety Code Section 130000-130025
Defined earthquake performance standards for hospitals.
- Public Resources Code Section 2805-2808
Established the California Earthquake Education Project.
- Government Code Section 8899.10-8899.16
Established the Earthquake Research Evaluation Conference.
- Public Resources Code Section 2621-2630 2621.
Established the Alquist-Priolo Earthquake Fault Zoning Act.
- Government Code Section 8878.50-8878.52 8878.50.
Created the Earthquake Safety and Public Buildings Rehabilitation Bond Act of 1990.
- Education Code Section 35295-35297 35295.
Established emergency procedure systems in kindergarten through grade 12 in all the public or private schools.
- Health and Safety Code Section 19160-19169
Established standards for seismic retrofitting of unreinforced masonry buildings.
- Health and Safety Code Section 1596.80-1596.879
Required all child day care facilities to include an Earthquake Preparedness Checklist as an attachment to their disaster plan.

Source: <http://www.leginfo.ca.gov/calaw.html>

3. Extreme Heat/Drought

General Definition:

Temperatures that hover 10 degrees or more above the average high temperature for the region and last for several weeks are defined as extreme heat. Humid or muggy conditions, which add to the discomfort of high temperatures, occur when a "dome" of high atmospheric pressure traps hazy, damp air near the ground. Excessively dry and hot conditions can provoke dust storms and low visibility. Droughts occur when a long period passes without substantial rainfall. A heat wave combined with a drought is a very dangerous situation.

Although the City does not have any agriculture, the population is at risk for adverse health effects from extreme heat. In a normal year, approximately 175 Americans die from extreme heat. Young children, elderly people, and those who are sick or overweight are more likely to become victims. While the City is limited to being able to predict exactly who might be affected, it is known that 17% of the City's population is 65 years of age or older.

Description:

While West Hollywood and the Los Angeles area experience moderate temperatures throughout the year, citizens are still vulnerable to unusually hot weather during the summer or early fall months.

4. Flash Flooding/Storms

General Definition:

A sudden flood of great volume, usually caused by a heavy rain.

Description:

The northern half of the City of West Hollywood sits at the base of the Hollywood Hills, and many streets have severe grades leading away from the hills. During heavy storms, residential and commercial properties in the area experience flooding and landslide damage from mud and debris. While not common, heavy storms can affect Southern California, e.g. the occasional El Nino Storms. Since the City does not have a long history, there have not been many severe storms; therefore, predictions for future events are limited.

5. Flooding

General Definition:

Floods are the most common and widespread of all natural disasters--except fire. Most communities in the United States have experienced some kind of flooding, after spring rains, heavy thunderstorms, or winter snow thaws.

A flood, as defined by the National Flood Insurance Program is: "A general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties (at least one of which is your property) from overflow of inland or tidal waters, unusual and rapid accumulation or runoff of surface waters from any source, or a mudflow. The collapse or subsidence of land along the shore of a lake or similar body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels that result in a flood."

Floods can be slow or fast rising but generally develop over a period of days. Mitigation includes any activities that prevent an emergency, reduce the chance of an emergency happening, or lessen the damaging effects of unavoidable emergencies. Investing in mitigation steps now, such as, engaging in floodplain management activities, constructing barriers, such as levees, and purchasing flood insurance will help reduce the amount of structural damage and financial loss from building and crop damage should a flood or flash flood occur. Flooding tends to occur in the summer and early fall because of the monsoon and is typified by increased humidity and high summer temperatures.

The standard for flooding is the term "100-year flood," a benchmark used by the Federal Emergency Management Agency to establish a standard of flood control in communities throughout the country. Thus, the 100-year flood is also referred to as the "regulatory" or "base" flood. Actually, there is little difference between a 100-year flood and what is known as the 10-year flood. Both terms are really statements of probability that scientists and engineers use to describe how one flood compares to others that are likely to occur. In fact, the 500-year flood and the 10-year flood are only a foot apart on flood elevation-which means that the elevation of the 100-year flood falls somewhere in between. The term 100-year flood is often incorrectly used and can be misleading. It does not mean that only one flood of that size will occur every 100 years, but rather that there is a one percent chance of a flood of that intensity and elevation happening in any given year. In other words, it is the flood elevation that has a one percent chance of being equaled or exceeded each year, and it could occur more than once in a relatively short period of time. (By comparison, the 10-year flood means that there is a ten percent chance for a flood of its intensity and elevation to happen in any given year.) Rod Bolin, The Ponca City News, July 18, 2002. Page 5-A

Description:

The Los Angeles Basin, of which West Hollywood is a part, has historically experienced flooding during major winter storm events. Fortunately, the City is situated on relatively high ground and does not have a major waterway subject to flood hazards. However, the City is situated at the base of the mountains with steep narrow canyons that drain into the City. Since the City does not have a long history, there has not been a major flood event; therefore, predictions for future events are limited.

The 1987 FEMA Flood Insurance Rate Map (FIRM) indicated that a small portion of the City is within a 100-year flood plain. Once the County of Los Angeles completes construction of the regional storm drain relief system, the

area classified as a 100-year flood plain (Zone AO) will be reclassified as Zone X, similar to the surrounding area.

6. High Winds/Straight Line Winds

General Definition:

High winds can result from thunderstorm inflow and outflow, or downburst winds when the storm cloud collapses, and can result from strong frontal systems, or gradient winds (high or low pressure systems) moving across Oklahoma. High winds are speeds reaching 50 mph or greater, either sustaining or gusting.

Description:

Windstorms can damage buildings, power lines, and other property and infrastructure due to falling trees and branches. For example, tree limbs breaking in winds of only 45 mph can be thrown over 75 feet. During wet winters, saturated soils cause trees to become less stable and more vulnerable to uprooting from high winds. In addition, windstorm activity can negatively impact transportation routes and power outages.

Perhaps the greatest danger from windstorm activity in Southern California comes from the combination of the Santa Ana winds with the major fires that occur every few years in the urban/wildland interface. With the Santa Ana winds driving the flames, the speed and reach of the flames is even greater than in times of calm wind conditions. The higher fire hazard raised by a Santa Ana wind condition requires that even more care and attention be paid to proper brush clearances on property in the wildland/urban interface areas.

One of the strongest and most widespread existing mitigation strategies pertains to tree clearance. Currently, California State Law requires utility companies to maintain specific clearances (depending on the type of voltage running through the line) between electric power lines and all vegetation. The California Public Resource Code (Sections 4293, 4292, 4291, and 4171) provides guidance on tree pruning regulations. In addition the California Code of Regulations and the California Public Utilities Commission both have provisions for clearance. The power companies, in compliance with the above regulations, collect data about tree failures and their impact on power lines. This mitigation strategy assists the power company in preventing future tree failure by company can advise residents as to the most appropriate vegetative planting and pruning procedures.

Santa Ana Winds

Santa Ana winds are generally defined as warm, dry winds that blow from the east or northeast (offshore). These winds occur below the passes and canyons of the coastal ranges of Southern California and in the Los Angeles basin. Santa Ana winds often blow with exceptional speed in the Santa Ana Canyon (the canyon from which it derives its name). Forecasters at the NWS in Oxnard and San Diego usually place speed minimums on these winds and reserve the use of "Santa Ana" for winds greater than 25 knots.

The complex topography of Southern California combined with various atmospheric conditions creates numerous scenarios that may cause widespread or isolated Santa Ana events. Commonly, Santa Ana winds develop when a region of high pressure builds over the Great Basin (the high plateau east of the Sierra Mountains and west of the Rocky Mountains including most of Nevada and Utah). Clockwise circulation around the center of this high pressure area forces air downslope from the high plateau. The air warms as it descends toward the California coast at the rate of 5 degrees F per 1000 feet due to compressional heating. Thus, compressional heating provides the primary source of warming. The air is dry since it originated in the desert, and it dries out even more as it is heated.

Santa Ana winds commonly occur between October and February with December having the highest frequency of events. Summer events are rare. Wind speeds are typically north to east at 35 knots through and below passes and canyons with gusts to 50 knots. Stronger Santa Ana winds can have gusts greater than 60 knots over widespread areas and gusts greater than 100 knots in favored areas. Frequently, the strongest winds in the basin occur during the night and morning hours due to the absence of a sea breeze. The sea breeze which typically blows onshore daily, can moderate the Santa Ana winds during the late morning and afternoon hours.

Santa Ana winds are an important forecast challenge because of the high fire danger associated with them. Also, unusually high surf conditions on the northeast side of the Channel Islands normally accompany a Santa Ana event. Other hazards include: wind damage to property, turbulence and low-level wind shear for aircraft, and high wind dangers for boaters.

Source: <http://nimbo.wrh.noaa.gov/Sandiego/snawind.html>

The following Santa Ana wind events were featured in news resources during 2003:	
January 6, 2003 OC Register	"One of the strongest Santa Ana windstorms in a decade toppled 26 power poles in Orange early today, blew over a mobile derrick in Placentia, crushing two vehicles, and delayed Metrolink rail service." This windstorm also knocked out power to thousands of people in northeastern Orange County.
January 8, 2003 CBSNEWS.com	"Santa Ana's roared into Southern California late Sunday, blowing over trees, trucks and power poles. Thousands of people lost power."
March 16, 2003 dailybulletin.com	Fire Officials Brace for Santa Ana Winds - - "The forest is now so dry and so many trees have died that fires, during relatively calm conditions, are running as fast and as far as they might during Santa Ana Winds. Now the Santa Ana season is here. Combine the literally tinder dry conditions with humidity in the single digits and 60-80 mph winds, and fire officials shudder."

7. Landslide

General Definition:

Landslides are a serious geologic hazard common to almost every state in the United States. It is estimated that nationally they cause up to \$2 billion in damages and from 25 to 50 deaths annually. Globally, landslides cause billions of dollars in damage and thousands of deaths and injuries each year.

Individuals can take steps to reduce personal risk by learning about potential hazards that affect the area, taking steps to reduce the risk, and practicing preparedness plans.

Some landslides move slowly and cause damage gradually, whereas others move so rapidly that they can destroy property and take lives suddenly and unexpectedly. Gravity is the force driving landslide movement. Factors that allow the force of gravity to overcome the resistance of earth material to landslide movement include: saturation by water, steepening of slopes by erosion or construction, alternate freezing or thawing, earthquake shaking, and volcanic eruptions.

Landslides are typically associated with periods of heavy rainfall or rapid snow melt and tend to worsen the effects of flooding that often accompanies these events. In areas burned by forest and brush fires, a lower threshold of precipitation may initiate landslides.

Description:

Non-seismic Landslides

Landslides refer to slope failures in natural rock or soil slopes and typically occur where a plane of weakness exists in the earth materials and elevated groundwater conditions exist.

Previous mapping in the Los Angeles County Seismic Safety Element suggests that the slopes at, or potentially affecting, the northern margin of the City are relatively stable.

Landslides caused by seismic events

Landslides tend to occur in loosely consolidated, wet soil and/or rock on sloping terrain. Landslides are also typically associated with bedrock slopes exhibiting unfavorably oriented planes of weakness such as bedding or joints. Oversteepened slopes (cliffs, stream banks, saturated soil-filled swales, man-made cuts and fills, etc.) are often prone to collapse when shaken by an earthquake. Ground motions produced by earthquakes can cause slopes to fail because the resultant force acting on the slide mass from ground acceleration exceeds the at-rest force restraining the slide. Water is often a contributing factor to landslide movement; thus springs, seeps, and man-introduced water sources (landscape irrigation, leach fields, storm drains, and leaking water lines) can influence landslide creation, movement, and extent of damage. There are some areas considered to be susceptible to landslides during strong earthquake ground shaking within the City derived from the CDMG Seismic Hazard Zone maps for the Beverly Hills and Hollywood quadrangles.

8. Wildfires

General Definition:

There are three different classes of wild land or wildfires. A surface fire is the most common type and burns along the floor of a forest, moving slowly and killing or damaging trees. A ground fire is usually started by lightning and

burns on or below the forest floor. Crown fires spread rapidly by wind and move quickly by jumping along the tops of trees. Wildfires are usually signaled by dense smoke that fills the area for miles around. Wildfires present a significant potential for disaster in the southwest, a region of relatively high temperatures, low humidity, and low precipitation during the summer, and during the spring, moderately strong daytime winds. Combine these severe burning conditions with people or lightning and the stage is set for the occurrence of large, destructive wildfires.

Description:

The City of West Hollywood sits at the base of the "Hollywood Hills" in the City of Los Angeles. The Hollywood Hills is densely populated by mostly single family homes and apartment buildings. Roads are difficult to navigate, and there is a lot of brush in the area. A fire in the Hollywood Hills could easily spread to the northern region of the City of West Hollywood which is also densely populated making large evacuations difficult.

Urban Fires due to Seismic Events

Urban fires are a constant threat in the City, given the seismic hazards of fault rupture, strong ground shaking, and liquefaction. In the United States, fires following earthquakes have caused the largest losses associated with earthquakes.

Urban fires following earthquakes are driven by two key features: 1) the earthquake is likely to ignite multiple, nearly simultaneous fires; and 2) the earthquake is likely to damage and disrupt fire suppression by severing water pipelines and delaying the arrival of adequate fire-fighting equipment and personnel.

Fire growth is related to building density, types building construction, the presence and amount of flammable materials, wind speed and direction, width of fire breaks, water supply, time of fire department arrival, and available fire fighter resources. Fortunately in this regard, the Salt Lake oil field is isolated along Beverly Boulevard at the southwest margin of the City. There are no major petrochemical or industrial plants.

Technology Hazards

1. Energy Emergency

General Definition:

A power/utility failure is defined as an actual or potential shortage of electric power or the interruption of electrical power which significantly threatens health and safety.

Many communities are vulnerable to many localized, short and long term energy emergencies. Power shortages or failures do occur and may be brought on by severe weather conditions, such as blizzards, ice storms, extreme heat, thunderstorms, or events such as war, civil disturbance.

Description:

As did much of California, the City of West Hollywood has experienced Rolling Blackouts caused by an energy supply shortage. Rolling blackouts are ordered by the California ISO. The City is served by Southern California Edison (SCE), so SCE would notify City officials of pending blackouts and give the circuits and times the blackouts would take place.

4.2 Hazard Profile

<p><i>IFR REQUIREMENT</i> §201.6(c)(2)(i):</p>	<p>[The risk assessment shall include a] description of the ... location and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.</p>
<p><i>Explanation:</i></p>	<p>When appropriate, the hazard analysis should also identify on a map the areas affected by each identified hazard. Additionally, a composite map should be provided for hazards with a recognizable geographic extent (i.e., hazards that are known to occur in particular areas of the jurisdiction, such as floods, coastal storms, wildfires, tsunamis, and landslides). For those hazards not geographically determined, plans should indicate their applicable intensity. For example, in areas where tornadoes occur, plans should indicate their maximum wind speed. The plan should provide a discussion of past occurrences of hazard events in or near the community in terms of their severity and resulting effects. The plans should also describe the analysis used to determine the probability of occurrence and magnitude of future hazard events. The plans should characterize each hazard and include the following information: - The probability or likelihood that the hazard event would affect an area; - The magnitude or severity of the hazard events; - The geographical extent or areas in the community that would be affected; and - The conditions, such as topography, soil characteristics, meteorological conditions, etc., in the area that make it prone to hazards. The analysis should be detailed enough to allow identification of the areas of the jurisdiction that are most severely affected by each hazard.</p>

The Critical Priority Risk Index (CPRI) factors the elements of risk: Probability (P), Magnitude/Severity (M), Warning Time (WT) and Duration to create an index which allows for the prioritization of mitigation activities based on the level of risk. CPRI uses a mathematic equation and user defined information to establish a ranking for each hazard that affects a community.

For each of the four criteria in the CPRI, there are four options from which to choose.

Probability: "Unlikely", "Possible", "Likely", "Highly Likely"

Magnitude/Severity: "Negligible", "Limited", "Critical", "Catastrophic"

Warning Time: "Greater than 24 hours", "12-24 hours", "6-12 hours", "less than 6 hours"

Duration: "Less than 6 hours", "Less than 1 day", "Less than 1 week", "More than 1 week"

Each of the four options represents a value of 0, 1, 2, 3, or 4. Zero is the value taken when an option is not assigned. Based on these four selections, the CPRI is calculated with the following weightings for each of the following criteria, Probability (P) weighted for 45%; Magnitude/Severity (M) for 30%; Warning Time (T) for 15%; and Duration (D) for 10%. This results in the following index calculation: $.45P + .3M + .15T + .1D = \text{CPRI}$. The CPRI is subjective in nature since it is based on the selection of options from four criteria. This ranking was used by the planning team appropriately in the discussion about hazard rankings.

The following hazards are listed with their CPRI scores.

Natural Hazards

Dam Failure

Historical Events

There are no documented historical dam failures that have affected the City of West Hollywood. Although the City of West Hollywood has no jurisdictional control over the dams and reservoirs in its vicinity, the City collaborates with the County of Los Angeles and surrounding water agencies to stay abreast of any potential negative to the community. The City receives a Dam and Reservoir Emergency Notification List from the City of Los Angeles, Department of Water and Power. Please refer to Dam Related Documents in the Appendix for a copy of this plan.

Calculated Priority Risk Index (CPRI)

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **1 - Unlikely**

The core planning team selected "unlikely" due to the review of the Dam and Reservoir Emergency Notification List from the City of Los Angeles and dam inundation maps. In addition, there have been no prior historical incidents.

Magnitude/Severity: **2 - Limited**

Due to the review of dam inundation maps (Dam Related Documents – Appendix), the impact to the City of West Hollywood is limited. A break at the Hollywood Reservoir would affect a limited portion of the eastern side of the City (less than 1 square mile affected). Failure of the tank at Greystone Park would inundate a portion of the southwest corner of the City (less than 1 square mile affected).

Warning Time: **4 - Less 6 Hours**

The warning time for a dam break is short, and most likely less than six hours.

Duration: **2 - Less than one day**

Severe inundation of water is not likely to last more than one day although there could be lingering affects of residual water.

The CPRI for the Dam Failure hazard for City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration =
CPRI

$$1 \times .45 + 2 \times .30 + 4 \times .15 + 2 \times .10 = 1.85$$

Natural Hazards

Earthquake

Historical Events

The City of West Hollywood is only 20 years old and fortunately has not experienced a major earthquake within its borders, but the City is located in a complex geologic and seismic setting. Numerous major faults occur in the surrounding region that could produce strong ground shaking. Please see "Earthquake Related Documents" in the Appendix for fault and liquefaction maps. Limitations to predicting damage from an earthquake to the City specifically include not being able to identify with certainty which fault might be affected, the magnitude of the earthquake, or the length of time of the shaking. Comparisons can be drawn from history and geologic studies and are addressed in the City's Seismic Safety Element. (Please see "Seismic Safety Element" in the Appendix).

Since it is very possible that the City will be seriously affected by a major earthquake in the future, the following section lists and describes two historical earthquakes that occurred near the City of West Hollywood in order to possibly predict effects of future events:

1. Northridge Earthquake - 1/17/2004

A 6.7 magnitude earthquake struck Southern California on January 17, 1994 at 4:31 AM. The epicenter was in the San Fernando Valley which is a densely populated area in Northern Los Angeles. According to a summary report by EQE International, "A few days after the earthquake, 9,000 homes and businesses were still without electricity; 20,000 were without gas; and more than 48,500 had little or no water. About 12,500 structures were moderately to severely damaged, leaving thousands of people temporarily homeless." FEMA estimates that the total cost of the earthquake was over 26 billion dollars.

Hazard: Earthquake
 Deaths: 57
 Injuries: 12,000 or more
 Displaced People: 20,000 or more
 Los Angeles, CA

The City of West Hollywood did declare a local emergency on January 25, 1994 and terminated the emergency's existence on February 22, 1994.

2. Whittier Earthquake - 10/1/1987

It was at 7:42 a.m. on October 1, 1987, that a strong earthquake measuring M5.8 rocked the east Los Angeles region. The Whittier Narrows earthquake shook the region quite hard, registering shaking intensities of VIII on the Modified Mercalli intensity scale (a relative shaking intensity scale from 1-12 shown in Roman Numerals).

The temblor was centered between Whittier and Montebello along the west-northwest trending Whittier fault zone and was felt as far away as Las Vegas. No surface fault ruptures were ever discovered. Eight people were killed and many were injured.

The quake damaged more than 10,400 buildings and the total cost of property damage exceeded \$350 million. Felt aftershocks lasted for months and micro earthquakes were recorded for years.

Source: <http://www.seismo-watch.com/EQSERVICES/NotableEQ/Oct/1001.Whittier.html>

Hazard: Earthquake
 Deaths: 8
 Injuries: 200
 Whittier, CA

The following table summarizes the occurrences, impact and costs of this hazard.

Hazard: Earthquake		Response and Recovery Costs
Name	Date	Estimated Total Spent on Response and Recovery
Northridge EQ	1/17/1994	over \$26,000,000,000
Whittier EQ	10/1/1987	over \$358,000,000
Totals:		\$26,358,000,000

Please see "Earthquake Related Documents" in the Appendix for a map of soil and rock sites, fault maps, liquefaction maps, and other earthquake related materials.

Calculated Priority Risk Index (CPRI)

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **3 - Likely**

The planning team identified the probability for a future earthquake affected the City as "likely". Although the City has a short history, the review of historical events in Southern California, the City's General Plan, and other geological documents indicate that an earthquake will likely occur.

Magnitude/Severity: **3 - Critical**

A review of the fault maps in the Southern California area indicates that a magnitude of 5.0 or greater is very possible. This magnitude would severely impact the community, so a "critical" designation is given.

Warning Time: **4 - Less 6 Hours**

Earthquakes give no warning. There is research into the field of "early warning" systems, but at this time, no warning system is available to the community.

Duration: **1 - Less than 6 hours**

The duration of the actual "shaking" is usually only several seconds, so "less than 6 hours" was selected. Although, the recovery process is likely to last several months and could drastically impact the community and its economy.

The CPRI for the Earthquake hazard for City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration =
CPRI

$$3 \times .45 + 3 \times .30 + 4 \times .15 + 1 \times .10 = 2.95$$

Natural Hazards

Extreme Heat

Historical Events

The City of West Hollywood does not have any agriculture so is not likely to experience economic loss from a drought. Although, periods of extreme heat could be a public health emergency as very high temperatures will negatively impact the health of West Hollywood residents. In addition, an especially

vulnerable population is the City's senior population which is seventeen per cent of the total population.

The following section lists and describes the historical events associated with this hazard in City of West Hollywood:

1. Summer 2000

The City of West Hollywood and the greater Los Angeles region experienced periods of extreme heat during the summer of 2000. The City held several sessions for seniors to educate them on the health risks involved and the resources available to them.

Hazard: Extreme Heat
West Hollywood, CA

Associated Files

File Title: [Heat Alert](#)

File Description: Heat alert public outreach flyer with tips for constituents in both English and Russian.

The following table summarizes the occurrences, impact and costs of this hazard.

Hazard: Extreme Heat		Public Education/Flashlight/Water Distribution Costs
Name	Date	Total
Senior Heat Alert	Summer 2000	\$1500

Calculated Priority Risk Index (CPRI)

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **2 - Possible**

Most of the year, the weather is mild in Southern California, but it is possible to have periods of extreme heat.

Magnitude/Severity: **2 - Limited**

Generally, vulnerable populations are affected more severely than the general population.

Warning Time: **1 - 24+ Hours**

Meteorologists can predict with some accuracy future weather events.

Duration: **4 - More than one week**

Extreme heat becomes more dangerous to the population when it lasts more than a few days.

The CPRI for the Extreme Heat hazard for City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration = CPRI

$$2 \times .45 + 2 \times .30 + 1 \times .15 + 4 \times .10 = 2.05$$

Natural Hazards

Flash Flooding

Historical Events

There are no documented historical major flash flooding events that have affected the City of West Hollywood since its incorporation. City residents and businesses located on the northern slope of the City (less than 1 square mile affected) do experience some flooding and debris damage from heavy storms that push debris, soil, and water down the hill.

Calculated Priority Risk Index (CPRI)

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **2 - Possible**

Although the weather is generally mild in Southern California, it is possible to experience some stronger storms.

Magnitude/Severity: **2 - Limited**

The magnitude of a flash flooding event is limited since it would not affect the entire City. The structures located on the northern slope and also at its base would experience the most damage (less than 1 square mile affected).

Warning Time: **3 - 6-12 Hours**

Since meteorologists can predict with some accuracy extreme weather events, the population may receive some warning so a timeframe of 6-12 hours was selected by the planning team.

Duration: **1 - Less than 6 hours**

Flash flooding is not likely to last more than a few hours, although the recovery process is likely to last for several days or weeks.

The CPRI for the Flash Flooding hazard for City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration =
CPRI

$$2 \times .45 + 2 \times .30 + 3 \times .15 + 1 \times .10 = 2.05$$

Natural Hazards

Flooding

Historical Events

The following section lists and describes the historical events associated with this hazard in City of West Hollywood:

As did much of Southern California, the City of West Hollywood has experienced flooding caused by the El Nino storms. Since the City is only 20 years old, it does not have much history with severe storms and flooding and is limited to predict future events.

Hazard: Flooding
West Hollywood, CA

Calculated Priority Risk Index (CPRI)

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **2 - Possible**

Although the weather is generally mild in Southern California, it is possible to experience some stronger storms.

Magnitude/Severity: **2 - Limited**

The magnitude of a flooding event is limited since it most likely would not affect the entire City. Fortunately, the City is situated on relatively high ground and does not have a major waterway subject to flood hazards. However, the City is situated at the base of the mountains with steep narrow canyons that drain into the City. The 1987 FEMA Flood Insurance Rate Map (FIRM) indicated that a small portion of the City is within a 100-year flood plain. Once the County of Los Angeles completes construction of the regional storm drain relief system, the area classified as a 100-year flood plain (Zone AO) will be reclassified as Zone X, similar to the surrounding area.

Warning Time: **2 - 12-24 Hours**

Since meteorologists can predict with some accuracy extreme weather events, the population may receive some warning so a timeframe of 6-12 hours was selected by the planning team.

Duration: **3 - Less than one week**

A severe storm may cause flooding in the City, especially in the southwestern portion of the City. The 1987 FEMA Flood Insurance Rate Map (FIRM) indicated that a small portion of the City is within a 100-year flood plain. Once the County of Los Angeles completes construction of the regional storm drain relief system, the area classified as a 100-year flood plain (Zone AO) will be reclassified as Zone X, similar to the surrounding area.

The CPRI for the Flooding hazard for City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration =
CPRI

$$2 \times .45 + 2 \times .30 + 2 \times .15 + 3 \times .10 = 2.1$$

Natural Hazards

High Winds/Straight Line Winds

Historical Events

Although the climate in Southern California is generally mild, the area can experience high winds or even Santa Ana winds which blow with exceptional speed (greater than 25 knots). Historically, falling trees have been the major cause of power outages in the region.

The following section lists and describes the historical events associated with this hazard in City of West Hollywood:

1. Windstorm 2003 - 3/26/2003

The City of West Hollywood experienced strong winds on March 26, 2003 that damaged several trees, light poles, and signs. City response included debris removal, repair of signs, and coordination with utility companies to repair power lines.

Hazard: High Winds/Straight Line Winds
West Hollywood, CA

The following table summarizes the occurrences, impact and costs of this hazard.

Hazard: High Winds/Straight Line Winds		Response and Recovery Costs
Name	Date	Total
Windstorm 2003	3/26/2003	\$10,000
Total:		\$10,000

Calculated Priority Risk Index (CPRI)

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **4 - Highly Likely**

Magnitude/Severity: **2 - Limited**

Warning Time: **2 - 12-24 Hours**

Duration: **3 - Less than one week**

The CPRI for the High Winds/Straight Line Winds hazard for City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration =
CPRI

$$4 \times .45 + 2 \times .30 + 2 \times .15 + 3 \times .10 = 3$$

Natural Hazards

Landslide

Historical Events

Over twenty documented historical landslides have occurred in California since 1928. There are no documented historical major landslides that have affected the City of West Hollywood since its incorporation, and previous mapping by the City of West Hollywood Seismic Safety Element suggests that the slopes at, or potentially affecting, the northern margin of the City are relatively stable.

Calculated Priority Risk Index (CPRI)

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **2 - Possible**

Although the northern slopes of the City are relatively stable, a landslide is still possible.

Magnitude/Severity: **2 - Limited**

The portion of the City that is on or near a slope is less than 1 square mile.

Warning Time: **4 - Less 6 Hours**

It is likely that little or no warning will be given for a major landslide event.

Duration: **1 - Less than 6 hours**

A landslide is unlikely to last more than a few minutes, although the recovery process may last for several weeks.

The CPRI for the Landslide hazard for City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration =
CPRI

$$2 \times .45 + 2 \times .30 + 4 \times .15 + 1 \times .10 = 2.2$$

Natural Hazards

Wildfires

Historical Events

The City of West Hollywood does not contain any forest area and is completely developed, but it is located at the base of the Hollywood Hills in Los Angeles City. A fire in Los Angeles City could spread down the hills into the City's jurisdiction. Since the City's incorporation, there are no documented historical wildfires that have spread into the City limits.

Calculated Priority Risk Index (CPRI)

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **2 - Possible**

While there has never been a wildfire that has spread into the borders of the City, it is still possible due to the history of wildfires in the Southern California area.

Magnitude/Severity: **3 - Critical**

Although the City is only 1.9 square miles, it is populated by over 36,000 residents. In addition, on a busy weekend night on Sunset Strip, several more thousand people are in town making evacuations extremely difficult.

Warning Time: **4 - Less 6 Hours**

Warning for the need for a major evacuation due to a quickly spreading fire would be extremely limited.

Duration: **2 - Less than one day**

While a wildfire in a neighboring jurisdiction is likely to last several days or weeks, structure fires in the City of West Hollywood due to a

neighboring fire are unlikely to burn for more than one day. Safe evacuation of residents and others would be critical.

The CPRI for the Wildfires hazard for City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration =
CPRI

$$2 \times .45 + 3 \times .30 + 4 \times .15 + 2 \times .10 = 2.6$$

Technology Hazards

Energy Emergency

Historical Events

Most of California experienced rolling blackouts and power outages during the years 2000-2001. While systems are in place to prevent such widespread blackouts due to supply shortages in the future, rolling blackouts are still possible. In addition, the City could experience an energy emergency for other reasons. For example, New York City and other portions of the country experienced a major power outage in 2003 which forced major urban area evacuations.

The following section lists and describes the historical events associated with this hazard in City of West Hollywood.

1. Rolling Blackouts - 12/5/2000

As did much of California, the City of West Hollywood experience Rolling Blackouts during late 2000 and 2001. The blackouts were caused by an energy supply shortage and were ordered by the California ISO. At times, the power outages forced closure of City Hall and other government facilities which reduced the amount of general services the City could provide to the community. Power outages in West Hollywood also affect some of the street signals by rendering them ineffective for traffic control. Vulnerable populations were also at risk as the blackouts continued into warmer weather. The City conducted "Extreme Heat Precaution" informational meetings for the senior population during this time.

Hazard: Energy Emergency
West Hollywood, CA

Associated Files:

File Title: SCE Grids

File Description: Southern California Edison grids and emergency and information.

Rolling blackouts cause a drain on the City's public safety and transportation resources and can impact the delivery of both emergency and essential services.

Calculated Priority Risk Index (CPRI)

Please refer back to the beginning of Section 4.2 for a description of the CPRI.

Probability: **3 - Likely**

Power outages are likely in the region.

Magnitude/Severity: **2 - Limited**

Power outages generally do not last for more than a few hours at a time.

Warning Time: **3 - 6-12 Hours**

At times, Southern California Edison is able to warn the City when rolling blackouts are necessary. Unplanned outages generally have no warning. The group selected the mid-range of 6-12 hours to balance out the two different scenarios.

Duration: **1 - Less than 6 hours**

Power outages generally do not last for more than a few hours, although a widespread outage in California or the western United States could potentially last for a longer period of time.

The CPRI for the Energy Emergency hazard for City of West Hollywood is:

Probability + Magnitude/Severity + Warning Time + Duration = CPRI

$$3 \times .45 + 2 \times .30 + 3 \times .15 + 1 \times .10 = 2.5$$

4.3 Vulnerability Assessment

4.3.1 Asset Inventory

<i>IFR REQUIREMENT</i> <i>§201.6(c)(2)(ii)(A):</i>	[The risk assessment shall include a] description of the jurisdiction's vulnerability to the hazards described in paragraph (c)(2)(I) of this section. This description shall include an overall summary of each hazard and its impact on the community. The plan should describe vulnerability in terms of: - the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas ...
<i>Explanation:</i>	This information list should be based on an inventory of existing and proposed structures within the community and/or an estimate of those located within identified hazard boundaries. The information should include critical facilities, such as shelters and hospitals, and infrastructure, such as roadways, water, utilities, and communication systems. The community should determine how far into the future they wish to go in considering proposed structures, including planned and approved development. It may be based on information in their comprehensive plan or land use plan. The community should determine how best to indicate structures that are vulnerable to more than one hazard.

The total Population of City of West Hollywood that is vulnerable to a hazard is approximately 36,000.

4.3.1.1 Community Asset Overview

This section provides an overview of the assets in City of West Hollywood as determined by the core planning team. The team examined financial documents, rent stabilization and housing records, law enforcement critical facilities lists, fire department critical facilities lists, existing City critical facilities lists, and social services organization lists. In addition, planning team members discussed the general population and housing characteristics of the City with members of the public and the Community Development Department.

Approximately 62.62% of the City's property is residential and 37.38% is commercial. Development is made up of a variety of building types including low rise commercial structures and multifamily structures (generally 1-2 stories) and some 7-8 story apartments. Business types include restaurants, clubs, fast food, retail, service and repair, hotels, any various small shops.

Critical Facilities:

Government facilities include city hall, various parks, a maintenance facility, parking structures, storage, the Sheriff's Station, and two fire stations. There are several businesses on Sunset Boulevard, Santa Monica Boulevard, and in

the Avenues of Art and Design area. (A list of the principal tax payers in the City are listed in a chart at the end of this section.) In addition, there are several schools, religious institutions, high-rises, multi-unit residential buildings, senior housing, and non-profit agencies in the City.

Non-Critical Facilities:

The City contains single family homes, multi-unit residential buildings, commercial buildings, and other structures.

Asset Summary:

Parameter	Value	Source
Residents	35,716	Census 2000
Assessed Value of Residential Property – 62.62%	\$2,727,438,905	LA County Assessor 2003/04 Combined Tax Rolls
Residential Units	24,110	Census 2000
Assessed Value of Commercial Property – 37.38%	\$1,627,893,784	LA County Assessor 2003/04 Combined Tax Rolls
Bridges, Airports, Freeways	0	N/A
Hospitals	0	N/A
Utilities, Large Industrial Sites	0	N/A
Post Offices	1	US Post Office
Libraries	1	Human Services Department
Parks	4	Human Services Department
Stadiums, Convention Centers, Major Public Venues	0	N/A
Schools & Preschools (private and public)	7	Human Services Department
Senior Housing Buildings	23	Human Services Department
Religious Organizations	7	Human Services Department
Fire Stations	2	Public Safety Division
Police Stations	1	Public Safety Division

4.3.1.2 Critical Facility List

This section provides a listing of the government owned Critical Facilities in City of West Hollywood.

City Hall

Government Facilities

8300 Santa Monica Boulevard

West Hollywood, CA 90069

Size: 39,512 SQ. FT.

Facility Description: NON COMB STEEL FRAME structure.

All essential and additional services that the City provides are coordinated by staff housed in City Hall. In addition, the West Hollywood City Council offices and City Departments, including City Manager, Administrative Services, Community Development, Economic Development, Finance, Human Services, Public Safety and Community Services, Public Information and Legal Services, Rent Stabilization and Housing, and Transportation and Public Works.

Primary Contact: Facilities/Landscape Manager 323-848-6400

West Hollywood Park Auditorium

Government Facilities

647 N. San Vicente Boulevard

West Hollywood, CA 90069

Size: 10,818 SQ. FT.

Facility Description: Auditorium/Gym/Cable Offices: MASONRY CONST/WOOD ROOF

Used for City Council meetings, public meetings, recreation activities, special events, cable TV operations, and community events. Can be used as an emergency shelter.

Primary Contact: Park Office 323-848-6400

Plummer Park Community & Senior Center

Government Facilities

7377 Santa Monica Boulevard

West Hollywood, CA 90046

Size: 1013 SQ. FT.

Facility Description: Plummer Park Community and Senior Services Center: ALL COMB (WOOD FRAME).

Contains Park Offices, Social Service Agency Office, Classrooms, and Teen Center. Used for recreation activities, classes, senior activities, social services, special events, community events, and lectures. Can be used as an emergency shelter.

Primary Contact: Park Office 323-848-6400

**Plummer Park Fiesta Hall
Government Facilities**

7377 Santa Monica Boulevard
West Hollywood, CA 90046
Size: 8,890 SQ. FT.

Facility Description: Plummer Park Fiesta Hall: MASONRY
CONST/WOOD ROOF

Used for recreation activities, meetings, special events. Could
be used for an emergency shelter.

Primary Contact: Park Office 323-848-6400

**Plummer Park Various Structures
Government Facilities**

7377 Santa Monica Boulevard
West Hollywood, CA 90046
Size: 10,391 SQ. FT.

Facility Description: Plummer Park/Great Hall, Long Hall,
Restroom, Pre-school, Tennis Shop: ALL COMB/WOOD FRAME

Used for recreation activities.

Primary Contact: Park Office 323-848-6400

**West Hollywood Park Various Structures
Government Facilities**

647 N. San Vicente Boulevard
West Hollywood, CA 90069
Size: 8,505 SQ. FT.

Facility Description: West Hollywood Park Various
Structures/Recreation Building, Pool/Shower, Restroom:
MASONRY CONST/WOOD ROOF

Tiny Tots, Equipment Shed, Storage Shed: ALL COMB (WOOD
FRAME)

Used for Recreation Activities.

Primary Contact: Park Office 323-848-6400

**Werle Building
Government Facilities**

626 N. Robertson Boulevard
West Hollywood, CA 90069
Size: 8,570 SQ. FT.

Facility Description: Werle Building: ALL COMB (WOOD FRAME)
Used for community and/or recreation activities.

Primary Contact: Facilities Manager 323-848-6400

**Hart Park
Government Facilities**

8341 De Longpre
West Hollywood, CA 90069
Size: 4,758 SQ. FT.

Facility Description: Hart Park/Actor's Studio: ALL COMB
(WOOD FRAME)

Used for recreation activities.

Primary Contact: Recreation Division 323-848-6400

Adult Day Health Center**Government Facilities**

7362 Santa Monica Boulevard

West Hollywood, CA 90046

Size: 5,300 SQ. FT.

Facility Description: Adult Day Health Center: ALL COMB (WOOD FRAME)

Used for social services.

Primary Contact: Social Services Division 323-848-6400

Free Clinic**Government Facilities**

621 N. San Vicente

West Hollywood, CA 90069

Size: 9,662 SQ. FT.

Facility Description: Free Clinic/Social Services Agency: ALL COMB (WOOD FRAME)

Provides social services.

Primary Contact: Social Services Division 323-848-6400

Kings Road Parking Structure**Government Facilities**

8383 Santa Monica Boulevard

West Hollywood, CA 90069

Size: 65,760 SQ. FT.

Facility Description: Primary Employee Parking Structure.

Primary Contact: Parking Manager 323-848-6400

Laurel House**Government Facilities**

1343-45 Laurel Avenue

West Hollywood, CA 90046

Size: 8,767 SQ. FT.

Facility Description: 6 Residential Units and Garages/Possible Development into Senior Housing.

Primary Contact: Rent Stabilization and Housing 323-848-6400

Kings Road Park**Government Facilities**

1000 Kings Road,

West Hollywood, CA 90069

Size: 2,735 SQ. FT.

Facility Description: Kings Road Park/Conference Center and Arbors/Public Restrooms: ALL COMB (WOOD FRAME)

Used for recreation activities, neighborhood meetings, community events. Could be utilized as an employee child care center in an emergency.

Primary Contact: Parks and Recreation Division 323-848-6400

Fire Station #7

Fire Stations

864 N. San Vicente Boulevard
West Hollywood , CA 90069

Facility Description: Los Angeles County Fire Station #7 - houses first responders and fire prevention offices. This structure is maintained by the County of Los Angeles.

Primary Contact: Fire Captain 310-358-3430

Old Fire Station #7

Government Facilities

954 N. Hancock Avenue
West Hollywood, CA 90069

Size: 2,625 SQ. FT.

Facility Description: Old, vacant Fire Station #7: MASONRY CONST/WOOD ROOF

Future development for 3 units of low-income housing.

Primary Contact: Facilities Manager 323-848-6400

City Field Services Facility

Government Facilities

7530 Santa Monica Boulevard
West Hollywood, CA 90046

Size: 3,000 SQ. FT.

Facility Description: Maintenance Yard Building (Modular Office) and Storage Containers: ALL COMB (WOOD FRAME)

used by facilities, streets, and landscape staff.

Primary Contact: Facilities Manager 323-848-6400

Fire Station #8

Fire Stations

7643 Santa Monica Boulevard
West Hollywood, CA 90046

Facility Description: Los Angeles County Fire Station #8 - houses first responders. This structure is maintained by the County of Los Angeles.

Primary Contact: Fire Captain 323-654-5445

West Hollywood Sheriff's Station

Police Stations

720 N. San Vicente Boulevard
West Hollywood, CA 90069

Facility Description: Los Angeles County Sheriff's Department/West Hollywood Station - houses first responders. This structure is maintained by the County of Los Angeles.

Primary Contact: Watch Commander 310-855-8850

Summary: Critical Facility List

Name	Facility Type	Critical Rank	Hazards Likely to Cause Property Damage
City Hall	Government Facilities	Critical	EQ*, Flooding, Winds, Fire
West Hollywood Park Auditorium	Government Facilities	Critical	EQ, Flooding, Winds, Fire
PP Community & Senior Center	Government Facilities	Critical	EQ, Flooding, Winds, Fire, Dam Failure
PP Fiesta Hall	Government Facilities	Critical	EQ, Flooding, Winds, Fire, Dam Failure
PP Various Structures	Government Facilities	High	EQ, Flooding, Winds, Fire, Dam Failure
WH Park Various Structures	Government Facilities	High	EQ, Flooding, Winds, Fire
Werle Building	Government Facilities	High	EQ, Flooding, Winds, Fire
Hart Park	Government Facilities	High	EQ, Flooding, Winds, Fire, Landslide
Adult Day Health Center	Government Facilities	Critical	EQ, Flooding, Winds, Fire
Free Clinic	Government Facilities	High	EQ, Flooding, Winds, Fire
Kings Road Parking Structure	Government Facilities	Critical	EQ, Flooding, Winds, Fire
Laurel House	Government Facilities	High	EQ, Flooding, Winds, Fire
Kings Road Park	Government Facilities	High	EQ, Flooding, Winds, Fire
Fire Station #7	Fire Stations	Critical	EQ, Flooding, Winds, Fire
Old Fire Station #7	Government Facilities	High	EQ, Flooding, Winds, Fire
City Field Services Facility	Government Facilities	Critical	EQ, Flooding, Winds, Fire
Fire Station #8	Fire Stations	Critical	EQ, Flooding, Winds, Fire
West Hollywood Sheriff's Station	Police Stations	Critical	EQ, Flooding, Winds, Fire

* "EQ" = Earthquake

4.3.1.3 Non-Critical Facility List – High Economic Importance

This section provides a listing of the Non-Critical Facilities in City of West Hollywood.

Old Pacific Bell Building

High Economic Importance

8759 Santa Monica Boulevard

West Hollywood, CA 90069

Size: 19,447 SQ. FT.

Facility Description: Old Pacific Bell Building/Warehouse with Office

Space/Vacant: ALL COMB (WOOD FRAME)

Primary Contact: Facilities Manager 323-848-6400

Tower Parking Lot

High Economic Importance

8775 Sunset Boulevard

West Hollywood, CA 90069

Size: 78 spaces

Facility Description: City owned parking lot on Sunset Boulevard. Generates revenue for the payment of debt service costs.

Primary Contact: Parking Manager 323-848-6400

Spaulding Parking Lot

High Economic Importance

7718 Santa Monica Boulevard

West Hollywood, CA 90046

Size: 28 spaces

Facility Description: City owned parking lot on Santa Monica Boulevard

Generates revenue for the payment of debt service costs.

Primary Contact: Parking Manager 323-848-6400

La Jolla Havenhurst Parking Lot

High Economic Importance

8200 Santa Monica Boulevard

West Hollywood, CA 90046

Size: 28 spaces

Facility Description: City leased parking lot on Santa Monica Boulevard

Generates revenue used for lease payments.

Primary Contact: Parking Manager 323-848-6400

El Tovar Parking Lot

High Economic Importance

8752 El Tovar Place

West Hollywood, CA 90069

Size: 44 spaces

Facility Description: City owned parking lot on El Tovar. Generates revenue for the payment of debt service costs.

Primary Contact: Parking Manager 323-848-6400

Melrose City Lot
High Economic Importance

8732 Melrose Avenue
 West Hollywood, CA 90069
 Size: 35 spaces

Facility Description: City leased parking lot on Melrose Avenue. Generates revenue used for lease payments.
Primary Contact: Parking Manager 323-848-6400

Westbourne City Lot
High Economic Importance

8701 Santa Monica Boulevard
 West Hollywood, CA 90069
 Size: 22 spaces

Facility Description: City leased parking lot on Sunset Boulevard. Generates revenue used for lease payments.
Primary Contact: Parking Manager 323-848-6400

Hancock City Parking Lot
High Economic Importance

8759 Santa Monica Boulevard
 West Hollywood, CA 90069
 Size: 61 spaces

Facility Description: City owned parking lot on Santa Monica Boulevard. Generates revenue for the payment of debt service costs.
Primary Contact: Parking Manager 323-848-6400

Summary: Non-Critical Facility List – High Economic Importance

City parking lots do not generally contain structures, yet damage to the lots or billboards can cause loss of revenue to the City.

Name	Facility Type	Critical Rank	Hazards Likely to Cause Property Damage
Old Pacific Bell Building	High Economic Importance	High	EQ*, Winds
Hancock City Parking Lot	High Economic Importance	High	EQ, Winds
Tower Parking Lot/Billboard	High Economic Importance	High	EQ, Winds
Spaulding Parking Lot/ Billboard	High Economic Importance	High	EQ, Winds
La Jolla/Havenhurst Parking Lot	High Economic Importance	High	EQ, Winds
El Tovar Parking Lot	High Economic Importance	High	EQ, Winds
Melrose City Lot	High Economic Importance	High	EQ, Winds
Westbourne City Lot	High Economic Importance	High	EQ, Winds

* "EQ" = Earthquake

Principal Tax Payers

June 30, 2003

(IN THOUSANDS)

	Taxpayer	Type of Business	2002-2003 Assessed Valuation	Percentage of Total Assessed Valuation
1	Pacific Design Center	Retail/Wholesale	\$156,994	3.71%
2	Sunset Millenium Holdings	Office Buildings	83,993	1.99%
3	Mondrian Holdings	Hotel	78,859	1.86%
4	BA Studios	Movie Studio	45,083	1.07%
5	Wyndham Bel Age	Hotel	42,694	1.01%
6	Cedars Sinai Medial Center	Medical Offices	36,480	0.86%
7	City of West Hollywood	Parks & City Hall	28,867	0.68%
8	Arden Realty	Medical Offices	27,967	0.66%
9	RWH Holdings. Inc.	Office Buildings/Hotel	26,376	0.62%
10	Charles Luckman	Office Buildings	21,489	0.51%
			<hr/>	
			\$548,802	12.97%
			<hr/> <hr/>	

Source: Hinderliter, De Llamas and Associates

Assessed Valuation: \$4,230,998,702

4.3.1.4 Individual Hazard Vulnerability Analysis

This section serves to identify each hazard confronting the community and its vulnerabilities to that hazard.

Please see the hazard composite map in the Appendix.

Natural Hazards

1. Dam Failure

a. Population.

In the City's 1.9 square miles, only a small portion of the community's population is vulnerable to dam failure. Less than 1 square mile of area would be affected, and substantially less than the City's 36,000 residents would be impacted.

b. Critical Facilities.

Critical facilities on the east, such as Plummer Park, are vulnerable to the reservoir or dam failing, and critical facilities on the west, such as West Hollywood Park, are vulnerable to property damage from steel tanks failing.

c. Non-Critical Facilities.

Non-critical facilities on the east, such as commercial and residential properties, are vulnerable to the reservoir or dam failing, and non-critical facilities on the west, such as commercial and residential properties, are vulnerable to property damage from steel tanks failing.

2. Earthquake

a. Population.

The entire population of 36,000 is vulnerable to an earthquake. In addition, on a busy weekend night, thousands more visitors are present in the City's restaurants and clubs on Sunset Strip.

b. Critical Facilities.

Every structure is potentially at risk during an earthquake. The specific critical facilities vulnerable in City of West Hollywood include City Hall, City Parks, City Maintenance Facilities, City Parking Structures, Residential Properties, Commercial Properties, High-Occupancy Buildings, and Senior Facilities.

c. Non-Critical Facilities.

The specific Non-Critical Facilities vulnerable in City of West Hollywood include various residential and commercial properties, social service agencies, and government resources.

3. Extreme Heat

a. Population.

All of the West Hollywood population can be negatively impacted by extreme heat. Seniors, infants, and other especially vulnerable populations would be affected more dramatically. Currently the majority of the senior population (17% of the City's population or about 6,000 residents) resides in the eastern portion of the City.

b. Critical Facilities.

This hazard affects people and the ability to provide resources more than it affects actual structures.

c. Non-Critical Facilities.

This hazard affects people and the ability to provide resources more than it affects actual structures.

4. Flash Flooding

a. Population.

Residents and businesses located on the northern slopes of the City are the most vulnerable to damage from hillside flooding. Although the area is less than one square mile, several high occupancy buildings, hotels, and residential structures are located on the slope.

b. Critical Facilities.

The specific critical facilities vulnerable in City of West Hollywood include key commercial and residential properties in the northern portion of the City, such as hotels, businesses on the Sunset Strip, high occupancy buildings, and residential structures.

c. Non-Critical Facilities.

The specific Non-Critical Facilities vulnerable in City of West Hollywood include various smaller commercial and residential properties.

5. Flooding

a. Population.

The population located in the southwest corner of the City is especially vulnerable to flood damage. Following planned construction of a regional storm drain relief system, Los Angeles County is planning to submit necessary paperwork to reclassify the 100-year flood plain (Zone AO) to a Zone X, similar to the surrounding area. The likely area affected by a major flood is less than one square mile.

b. Critical Facilities.

Critical facilities located in the southwest corner of the City would be affected by a very large flood and include various commercial and residential structures such as single family homes, high occupancy buildings, condominiums and apartments. Please see "Flood Hazard Map" in the Flood Related Documents Appendix.

The 1987 FEMA Flood Insurance Rate Map (FIRM) indicated that a small portion of the City is within a 100-year flood plain. Once the County of Los Angeles completes construction of the regional storm drain relief system, the area classified as a 100-year flood plain (Zone AO) will be reclassified as Zone X, similar to the surrounding area.

c. Non-Critical Facilities.

Non-Critical facilities located in the southwest corner of the City would be affected by a very large flood and include various residential structures.

The 1987 FEMA Flood Insurance Rate Map (FIRM) indicated that a small portion of the City is within a 100-year flood plain. Once the County of Los Angeles completes construction of the regional storm drain relief system, the area classified as a 100-year flood plain (Zone AO) will be reclassified as Zone X, similar to the surrounding area.

6. High Winds/Straight Line Winds

a. Population.

Very few injuries to people are recorded during the types of high winds that Southern California experiences. Most damage is to property, but roads blocked by fallen trees during a windstorm may have severe consequences to people who need access to emergency services.

b. Critical Facilities.

All critical facilities are at risk for damage from severe winds which can damage structures, roads, traffic signals, and streetlights. The area affected is 1.9 square miles.

c. Non-Critical Facilities.

All non-critical facilities are at risk for damage from severe winds. The area affected is 1.9 square miles. Industry and commerce can suffer economic

losses from interruptions in electric services and from extended road closures as well as sustaining direct property damage.

7. Landslide

a. Population.

Residents and businesses located on the northern slopes of the City are the most vulnerable to damage from landslides. Although the area is less than one square mile, several high occupancy buildings, hotels, and residential structures are located on the slope.

b. Critical Facilities.

The specific critical facilities vulnerable in City of West Hollywood include key commercial and residential properties in the northern portion of the City, such as hotels, businesses on the Sunset Strip, high occupancy buildings, and residential structures. The area affected is less than one square mile.

c. Non-Critical Facilities.

Non-critical Facilities in the City that are near or close to the Hollywood Hills are susceptible to debris damage from a landslide. The area affected is less than one square mile.

8. Wildfires

a. Population.

The City of West Hollywood sits at the base of the "Hollywood Hills" in the City of Los Angeles. The Hollywood Hills is densely populated by mostly single family homes and apartment buildings. Roads are difficult to navigate, and there is a lot of brush in the area. A fire in the Hollywood Hills could easily spread to the northern region of the City of West Hollywood which is also densely populated making large evacuations difficult.

b. Critical Facilities.

Fire growth is related to building density, types building construction, the presence and amount of flammable materials, wind speed and direction, width of fire breaks, water supply, time of fire department arrival, and available fire fighter resources. Fortunately in this regard, the Salt Lake oil field is isolated along Beverly Boulevard at the southwest margin of the City. There are no major petrochemical or industrial plants. Specific Critical Facilities vulnerable in City of West Hollywood include major commercial and residential properties on and around the Sunset Strip. The area affected is less than one square mile.

c. Non-Critical Facilities.

The specific Non-Critical Facilities vulnerable in City of West Hollywood include major commercial and residential properties on and around the Sunset Strip. The area affected is less than one square mile.

Technology Hazards

1. Energy Emergency

a. Population.

An energy emergency affecting the entire 1.9 square miles of the City would affect approximately 36,000 residents. In addition, several thousand visitors can be present on a busy weekend evening, especially on Sunset Strip.

b. Critical Facilities.

All government facilities can be affected by rolling blackouts and power failures. It is predicted that the State of California will experience more rolling blackouts in the future.

c. Non-Critical Facilities.

All neighborhoods in West Hollywood are vulnerable to rolling blackouts and power outages.

4.3.2 Potential Loss Estimation

<p><i>IFR REQUIREMENT</i> §201.6(c)(2)(ii)(B):</p>	<p>[The plan should describe vulnerability in terms of an] estimate of the potential dollar losses to vulnerable structures identified in paragraph (c)(2)(I)(A) of this section and a description of the methodology used to prepare the estimate ...</p>
<p><i>Explanation:</i></p>	<p>Describing vulnerability in terms of dollar losses provides the community and the State with a common framework in which to measure the effects of hazards on assets. The plan should include an estimate of losses for the identified vulnerable assets. An estimate should be provided for each hazard, and should include, when resources permit, structure, contents, and function losses to present a full picture of the total loss for each asset.</p>

4.3.2.1 Facility Replacement Cost Estimation

This section describes the replacement costs and economic impacts from lost facilities. All listed values are current as of January 22, 2004 and are from the CJPIA property schedule prepared by Driver Alliant Insurance Services.

Old Pacific Bell Building

High Economic Importance

Facility Replacement Cost: \$841,466

Description of Economic Impact: Damage to City parking lots would result in a loss of revenue that the City utilizes to pay debt service.

Tower Parking Lot

High Economic Importance

Facility Replacement Cost: \$400,000 in improvements

Description of Economic Impact: Damage to City parking lots would result in a loss of revenue that the City utilizes to pay debt service. In addition, a City billboard generating revenue is also located at this site.

Spaulding Parking Lot

High Economic Importance

Facility Replacement Cost: \$300,000 in improvements

Description of Economic Impact: Damage to City parking lots would result in a loss of revenue that the City utilizes to pay debt service. In addition, a City billboard generating revenue is also located at this site.

La Jolla Havenhurst Parking Lot
High Economic Importance

Facility Replacement Cost: \$13,000 in improvements
Description of Economic Impact: Damage to City parking lots would result in a loss of revenue that the City utilizes to pay debt service.

El Tovar Parking Lot
High Economic Importance

Facility Replacement Cost: \$250,000 in improvements
Description of Economic Impact: Damage to City parking lots would result in a loss of revenue that the City utilizes to pay debt service.

Melrose City Lot
High Economic Importance

Facility Replacement Cost: \$2,000 in recent improvements
Description of Economic Impact: Damage to City parking lots would result in a loss of revenue that the City utilizes to pay debt service.

Westbourne City Lot
High Economic Importance

Facility Replacement Cost: \$14,000 in improvements
Description of Economic Impact: Damage to City parking lots would result in a loss of revenue that the City utilizes to pay debt service.

Hancock City Parking Lot
High Economic Importance

Facility Replacement Cost: \$2,000 in recent improvements
Description of Economic Impact: Damage to City parking lots would result in a loss of revenue that the City utilizes to pay debt service.

City Hall
Government Facilities

Facility Replacement Cost: \$7,419,851
Description of Economic Impact: The loss of this structure would critically impact the City's ability to respond to the community's needs.

West Hollywood Park Auditorium
Government Facilities

Facility Replacement Cost: \$1,907,707
Description of Economic Impact: Damage to this facility would result in a reduction of recreation services to the community. In addition, this facility is used for public meetings such as City Council meetings and Commission meetings.

Plummer Park Community & Senior Center
Government Facilities

Facility Replacement Cost: \$2,745,283
Description of Economic Impact: Damage to this facility would result in a reduction of social services and recreations services to the community.

Plummer Park Fiesta Hall

Government Facilities

Facility Replacement Cost: \$1,673,398

Description of Economic Impact: Damage to this facility would result in a reduction of recreation services to the community.

Plummer Park Various Structures

Government Facilities

Facility Replacement Cost: \$892,459

Description of Economic Impact: Damage to this facility would result in a reduction of recreation services to the community.

West Hollywood Park Various Structures

Government Facilities

Facility Replacement Cost: \$800,908

Description of Economic Impact: Damage to this facility would result in a reduction of recreation services to the community.

Werle Building

Government Facilities

Facility Replacement Cost: \$800,118

Description of Economic Impact: Damage to this facility would result in a reduction of recreation services and social services to the community.

Hart Park

Government Facilities

Facility Replacement Cost: \$609,026

Description of Economic Impact: Damage to this facility would result in a reduction of recreation services to the community.

Adult Day Health Center

Government Facilities

Facility Replacement Cost: \$531,756

Description of Economic Impact: Damage to this facility would result in a reduction of social services to the community.

Free Clinic

Government Facilities

Facility Replacement Cost: \$915,232

Description of Economic Impact: Damage to this facility would result in a reduction of social services to the community.

Kings Road Parking Structure

Government Facilities

Facility Replacement Cost: \$3,408,800

Description of Economic Impact: Damage to City parking lots would result in a loss of revenue that the City utilizes to pay debt service.

Laurel House

Government Facilities

Facility Replacement Cost: \$1,076,578

Description of Economic Impact: This facility is currently slated to be converted into a community center and housing. Damage to this structure would impede the progress of this project.

Kings Road Park

Government Facilities

Facility Replacement Cost: \$212,033

Description of Economic Impact: Damage to this facility would result in a reduction of recreation services to the community.

Old Fire Station #7

Government Facilities

Facility Replacement Cost: \$393,750

Description of Economic Impact: This facility is being converted to three living units by the end of 2004. Damage to this facility would cause displaced persons and loss of rental revenue.

City Field Services Facility

Government Facilities

Facility Replacement Cost: \$148,200

Description of Economic Impact: Damage to this facility would result in a reduction of the facilities, landscape, and maintenance staff to provide services to the City.

Fire Station #7

Fire Stations

Facility Replacement Cost: This structure is the responsibility of the County of Los Angeles.

Description of Economic Impact: The loss of this structure would critically impair the ability of the County of Los Angeles Fire Department to respond to an emergency.

Fire Station #8

Fire Stations

Facility Replacement Cost: This structure is the responsibility of the County of Los Angeles.

Description of Economic Impact: The loss of this structure would critically impair the ability of the County of Los Angeles Fire Department to respond to an emergency.

West Hollywood Sheriff's Station

Police Stations

Facility Replacement Cost: This structure is the responsibility of the County of Los Angeles.

Description of Economic Impact: The loss of this structure would critically impair the ability of the County of Los Angeles Sheriff's Department to respond to an emergency.

4.3.2.2 Individual Hazard Economic Loss Estimation

The level of kind and level of damage to buildings, infrastructure, critical facilities, and other activities such as evacuation and emergency services is difficult to estimate accurately. A limitation to generating specific estimates includes not knowing the exact impact of a potential hazard. For example, it would depend on what magnitude of earthquake, the location of the epicenter, the duration of the shaking, the types of structures affected, the time of day, etc. to start to accurately predict exact financial loss. Although, it is possible to estimate facility replacement costs for City structures.

Facility replacement costs are detailed in Section 4.3.2.1 and the top ten taxpayers are listed in 4.3.1.3.

This section describes the potential losses due to each hazard confronting the community or jurisdiction:

Natural Hazards

1. Dam Failure

A dam failure could cause flooding and water damage to structures resulting in loss of revenue and ability to provide emergency, essential, and non-essential services. The total area affected is less than one square mile.

2. Earthquake

An earthquake can cause damage to structures, utilities, transportation routes, and communication resulting in loss of revenue and ability to provide emergency, essential, and non-essential services. In addition, recovery includes substantial debris removal issues and multiple building inspections. The area affected is the entire 1.9 square miles of the City.

3. Extreme Heat

An extreme heat episode can cause damage to utilities and impede the City's ability to provide emergency, essential, and non-essential services. The area affected is the entire 1.9 square miles of the City.

4. Flash Flooding

Flash flooding can cause damage to structures, utilities, transportation routes, and communication resulting in loss of revenue and ability to provide emergency, essential, and non-essential services. In addition, recovery includes substantial debris removal issues and multiple building inspections. The total area affected is less than one square mile.

5. Flooding

Flooding can cause damage to structures, utilities, transportation routes, and communication resulting in loss of revenue and ability to provide emergency,

essential, and non-essential services. In addition, recovery includes substantial debris removal issues and building inspections. The total area affected is less than one square mile.

6. High Winds/Straight Line Winds

High winds can cause damage to structures, utilities, transportation routes, and communication resulting in loss of revenue and ability to provide emergency, essential, and non-essential services. In addition, winds can aggravate fires and intensify the damage and the resources needed to respond. The area affected is the entire 1.9 square miles of the City.

7. Landslide

Landslides can cause damage to structures, utilities, transportation routes, and communication resulting in loss of revenue and ability to provide emergency, essential, and non-essential services. In addition, landslides generate many debris removal issues. The total area affected is less than one square mile.

8. Wildfires

Wildfires can cause damage to structures, utilities, transportation routes, and communication resulting in loss of revenue and ability to provide emergency, essential, and non-essential services. The total area affected is less than one square mile.

Technology Hazards

1. Energy Emergency

While rolling blackouts do not cause the devastation of other hazards, they can severely impact the City's ability to provide emergency and regular services to its constituents. In addition, if businesses are unable to operate due to a power loss, revenue is substantially affected. The area affected is the entire 1.9 square miles of the City.

4.3.2.3 Individual Hazard Human Loss Estimation

The following description of human loss is severely limited by the lack of the ability of City personnel to predict the magnitude, the location, the time of day, and the duration of the hazard.

Natural Hazards

1. Dam Failure

A dam failure can cause fatalities, injuries, displaced populations, and public health issues.

2. Earthquake

An earthquake can cause fatalities, injuries, displaced populations, and public health issues.

3. Extreme Heat

A period of extreme heat can cause fatalities, injuries, displaced populations, and public health issues.

4. Flash Flooding

Flash flooding can cause fatalities, injuries, displaced populations, and public health issues.

5. Flooding

Flooding can cause fatalities, injuries, displaced populations, and public health issues.

6. High Winds/Straight Line Winds

Severe winds can cause fatalities, injuries, displaced populations, and public health issues.

7. Landslide

Landslides can cause fatalities, injuries, displaced populations, and public health issues.

8. Wildfires

Wildfires can cause fatalities, injuries, displaced populations, and public health issues.

Technology Hazards

1. Energy Emergency

Energy emergencies can cause fatalities, injuries, displaced populations, and public health issues.

4.3.3 Analysis of Community Development Trends

<p><i>IFR REQUIREMENT</i> §201.6(c)(2)(ii)(C):</p>	<p>[The plan should describe vulnerability in terms of] providing a general description of land uses and development trends within the community so that mitigation options can be considered in future land use decisions.</p>
<p><i>Explanation:</i></p>	<p>The plan should provide a general overview of land uses and types of development occurring within the community. This can include existing and proposed land uses as well as development densities in the identified hazard areas and any anticipated future changes. This information provides a basis for making decisions on the type of mitigation approaches to consider, and the locations in which these approaches should be applied. This information can also be used to influence decisions regarding future development in hazard areas.</p>

4.3.3.1 Development History

This section describes the development history for City of West Hollywood.

Development History:

The development of West Hollywood reflects its transition from a workers' village for the railroad lines at the turn of the twentieth century to the increasingly dense urban village of today. Characterized by the adjacency of residential districts to main regional thoroughfares such as Sunset Boulevard and La Brea Avenue, the City's commercial buildings are frequently adjacent to residential neighbors. Development is made up of the variety of building types including low rise commercial structures and multifamily structures (generally 1-2 stories) and some 7-8 story apartments dating from the 1920-30's, of wood-frame or masonry construction. All masonry buildings have undergone a systematic retrofitting program to bring them into compliance with recent building codes.

Only a few residential buildings remain from the original turn-of-the-century community. Most of the City's single family homes and duplexes are small and date from the 1920s. Development in the 1950s particularly changed the scale of some sections of West Hollywood, placing larger apartment buildings in existing neighborhoods and office towers along the Sunset Strip.

Typical current private development includes demolition of older single family and duplex buildings, and construction of higher density low to midrise apartment and condominium buildings (2-4 stories). There are also a significant number of commercial remodeling projects along the City's commercial streets, although these typically are performed for aesthetic

reasons and do not significantly increase building area or intensify existing uses.

Capital Improvement Projects since Cityhood:

- * Purchased, redesigned, and reconstruction of Santa Monica Boulevard
- * Constructed the West Hollywood Community Center at Plummer Park
- * Renovated William S. Hart Park
- * Constructed Kings Road Park
- * Constructed Kings Road Parking Structure
- * Purchased and constructed a new City Hall
- * Constructed Fire Station #7 in collaboration with the County of Los Angeles
- * Constructed Holloway Park and Veteran's Memorial
- * Purchased and renovated several public parking lots

Future Development:

West Hollywood's overall density of 18,998 persons per square mile is almost twice as much as any other local city and one of the densest in all of California. Its residential character is a blend of architectural richness and historic landmarks co-existing with the City's eclectic business.

Tensions arising from the residents' desire to retain parking spaces and personal privacy, and the resources the businesses need to survive require an ongoing balancing act. The City often works with a neighborhood and its surrounding commerce to discuss their differences and achieve solutions or compromise.

West Hollywood remains committed to providing market-rate and affordable housing for residents who face displacement due to rising housing costs. The West Hollywood Community Housing Corporation develops, owns, and operates more than 200 affordable housing units in the City financed, in part, by the City's Housing Trust Fund. The West Hollywood Inclusionary Housing Program requires new residential developments to reserve a specific percentage of housing units for low and moderate-income persons. In an effort to develop other possibilities for more affordable housing within the community, the concept of providing incentives for mixed-use and live-work development was proposed by the participants at virtually each of the strategic planning sessions of the Strategic Plan development. In future development, mitigation measures are planned for and are in collaboration with the City's General Plan, building and safety codes, state mandated programs, and traffic circulation requirements.

Future Capital Improvement Projects Include:

- * New Library
- * Two Park Master Plans
- * Additional Parking Opportunities

4.4 Multi-Jurisdictional Risk Assessment

<i>IFR REQUIREMENT</i> <i>§201.6(c)(2)(iii):</i>	For multi-jurisdictional plans, the risk assessment section must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.
<i>Explanation:</i>	The multi-jurisdictional plan can present information for the general planning area as a whole as described in the previous paragraphs. However, where hazards and associated losses occur in only part of the planning area, this information should be attributed to the particular jurisdiction in which they occur. Further, where unique construction characteristics occur, they should be indicated on the plan so that appropriate mitigation measures are considered.

4.4 Multi-Jurisdictional Risk Assessment

Not Applicable

Section 5 – Mitigation Strategy

5.1 Community Capability Assessment

Storm Water Management Ordinances: Yes

Stream Management Ordinances: No

Zoning Management Ordinances: Yes

Subdivision Management Ordinances: Yes

Erosion Management Ordinances: Yes

Floodplain Management Ordinances: Yes

Floodplain Management Plan Published Date: 1988

Floodplain Management Last Delineation Date: 3/12/1999

Elevation Certificates Maintained: Yes

National Flood Insurance Program Community: Yes

National Flood Insurance Join Date: 6/18/1987

NFPI Number: 0607200005A

NFPI Rating: there is one zone AO in the City

NFPI Rating Date: 6/18/1987

Land Use Plan: Yes

Land Use Plan Last Update: 5/1/2001

Community Zoned: Yes

Zoned Date: 5/1/2001

Established Building Codes: Yes

Building Codes Last Updated: 1/1/2002

Type of Building Codes: International/Uniform

Local Electric Utilities: Southern California Edison

Local Water Utilities: LA City DWP/City of Beverly Hills

Local Sewage Treatment Utilities: Los Angeles City

Local Natural Gas Utilities: Southern California Gas

Local Telephone Utilities: various

Fire Insurance Rating: West Hollywood is located within Fire Zone 3.

Please see the Appendix for "Modifications to the State Building Code".

The Community Development Department and the Transportation Department maintain the various plans, ordinances, and projects for which the City is responsible.

5.1.1 Existing Plans, Policies, and Ordinances

This section describes the existing plans, policies, and ordinances for City of West Hollywood.

Existing Community Plans/Documents:

Standardized Emergency Management System – Emergency Plan
General Plan
Seismic Safety Element
Uniform Building Code
Vision 20/20 - Strategic Plan
"West Hollywood Is Prepared" - Disaster Preparedness Handbook
Administrative Regulations

5.1.2 Prior Mitigation Actions and Projects

This section serves to identify the Previous Mitigation Plans, Projects and Actions:

Previous Mitigation Plans, Projects and Actions:

The Community Development Department and the Transportation Department maintain the various plans, ordinances, and projects for which the City is responsible.

Previous mitigation projects include retrofits after the Northridge Earthquake, the renovation of Santa Monica Boulevard, the update of traffic signals, and the County of Los Angeles' renovation of the storm drain project. In addition, the Transportation Department conducts annual maintenance of tree roots affecting sewers and sidewalk/infrastructure repairs. Please see the mitigation project summary chart on page 85 for more detail.

Capital Improvement Projects:

Capital projects are long-term improvement and maintenance programs designed to preserve the City's physical systems and facilities. The programs have been broad, and have included land and building acquisitions, development of off-street parking, street and sidewalk rehabilitation, sewer reconstruction, information technology systems development, public lighting projects, affordable housing development, and park acquisition and renovations. Capital improvements enhance economic development by attracting new businesses and new customers, bringing increase vitality to the City.

Capital projects may be funded from several sources, including operating capital, grants, joint agency endeavors, public/private partnerships, special district projects, and debt financing. Tax increases and special districts have historically been used to fund capital projects; however, legislation now places severe restrictions on cities abilities to raise revenues in these ways. Special taxes must be approved by a two-thirds vote of the electorate; general taxes must be approved by a majority vote of the electorate.

5.1.3 Technical and Fiscal Resources

This section describes the technical and fiscal resources for City of West Hollywood.

Technical and Fiscal Resources:

The City of West Hollywood has seven departments that direct all resources including, Administrative Services, Community Development, Economic Development, Finance, Public Safety, Rent Stabilization and Housing, and Transportation. Within the Finance Department, the Information Systems Division provides the City with technical expertise. The City's fiscal resources are provided by the City's General Fund. The General Fund is supported by various tax and other revenue sources. City Departments submit two year budget plans which are approved by City Council.

Local funding sources for mitigation projects are limited but can include taxes and grants for Capital Improvement Projects and maintenance projects.

5.2 Mitigation Goals

<p><i>IFR REQUIREMENT</i> §201.6(c)(3)(i):</p>	<p>[The hazard mitigation strategy shall include: a] description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.</p>
<p><i>Explanation:</i></p>	<p>The community's hazard reduction goals, as reflected in the plan, along with their corresponding objectives, guide the development and implementation of mitigation measures. This section should describe what these goals are and how they were developed. The goals could be developed early in the planning process and refined based on the risk assessment findings, or developed entirely after the risk assessment is completed. They should also be compatible with the goals of the community as expressed in other community plan documents. Although the Rule language does not require a description of objectives, communities are highly encouraged to include a description of the objectives developed to achieve the goals so that reviewers understand the connection between goals, objectives, and activities. The goals and objectives should: - Be based on the findings of the local and State risk assessments; and - Represent a long-term vision for hazard reduction or enhancement of mitigation capabilities.</p>

5.2 Mitigation Goals

The following section provides an overview of the Mitigation Goals and Objectives which are prioritized according to the importance of protecting life, property, and the environment as well as the availability of existing resources to support ongoing and future programs:

1. Ensure Effective Response to Hazards

Description:

Ensure the availability and effective response of emergency services following an earthquake or other disaster.

Objective:

Provide effective response in a disaster, for life-saving and the curtailment of property damage and social dislocation; enhance emergency preparedness through community education and self-help programs; and prevent serious damage and injuries through effective hazard mitigation (Seismic Safety Element – Objective 14.7).

Ongoing Action Item:

Continue to work with existing programs, policies, and agencies, through mitigation activities and capital improvement projects to ensure effective response to hazards.

2. Promote Effective Response & Recovery through Preparedness

Description:

Prepare the city for effective response to, and rapid, beneficial recovery from, an earthquake or other hazard.

Objective:

Plan for and facilitate the rapid and effective recovery of the city following an earthquake; prevent the recurrence of specific problems and hazards encountered during an earthquake; and plan for alternative sources of financing of damage and reconstruction (Seismic Safety Element – Objective 14.8).

Ongoing Action Item:

Continue to work with existing programs, policies, and agencies, through city-wide preparedness efforts to ensure effective response and recovery from hazards.

3. Reduce Impact of Hazard

Description:

Substantially reduce the level of death, injury, property damage, economic and social dislocation and disruption of vital services that would result from earthquake damage or other hazard.

Objectives:

Ensure the continued functioning of essential facilities following a disaster; prevent loss of life from the failure of critical and sensitive facilities in an earthquake; and help prevent major problems for post-disaster response, such as difficult or hazardous evacuations or rescue, large numbers of injuries, and major clean-up or decontamination of hazardous materials (Seismic Safety Element – Objective 14.1).

Prevent the loss of life, serious injuries, and major social and economic disruption caused by the collapse of or severe damage to vulnerable buildings in an earthquake (Seismic Safety Element – Objective 14.2).

Protect health and life safety from the adverse effects of strong ground motion, through the implementation of effective standards for seismic design of structures in the City of West Hollywood, consistent with the state-of-the-art, and reduce the level of potential property damage from strong ground motion, thereby facilitating rapid physical and economic recovery following an earthquake (Seismic Safety Element – Objective 14.3).

Protect life safety, substantially reduce the damage from fault rupture,

and help ensure orderly evacuation of building occupants following an earthquake (Seismic Safety Element – Objective 14.4).

Protect life safety and essential lifelines; reduce the potential for property damage from liquefaction; and promote the collection of more complete information on liquefaction susceptibility throughout the City (Seismic Safety Element – Objective 14.5).

Protect Critical Facilities from damage, loss of function or inaccessibility in the event of damage to the dam; protect sensitive facilities from detrimental consequences of inundation; and help ensure the rapid and orderly evacuation of populations in the potential inundation area, if necessary (Seismic Safety Element – Objective 14.6).

Ongoing Action Item:

Continue to work with existing programs, policies, and agencies, through mitigation activities, the West Hollywood Municipal Code, the Uniform Building Code, planning and building and safety review, public hearings, and staff review to reduce the impact of hazards.

4. Maximize both Internal and External Resources for Investment in Hazard Mitigation

Description:

Maximize both internal and external resources in hazard mitigation.

Objectives:

Maximize the use of internal sources of funding for mitigation programs.

Identify, apply for, and utilize external sources of funding for mitigation programs.

Ongoing Action Items:

Prioritize mitigation and capital improvement projects, based on cost effectiveness for projects that promote protecting life, property, and the environment.

Continue to search for external funding sources to support mitigation and capital improvement projects.

5. Increase public understanding, support, and demand for hazard mitigation.

Description:

Utilize existing and procure additional resources to adequately educate the residents and business owners of West Hollywood regarding hazard mitigation.

Objective:

Provide printed materials and seminars to residents and business owners regarding non-structural hazard mitigation and other mitigation activities.

Proposed Action Item:

Design, implement, and evaluate a public education campaign to encourage residents and property owners to conduct mitigation activities.

5.3 Mitigation Actions/Projects

<p><i>IFR REQUIREMENT</i> §201.6(c)(3)(ii):</p>	<p>[The mitigation strategy shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard with particular emphasis on new and existing buildings and infrastructure.</p>
<p><i>Explanation:</i></p>	<p>The local jurisdiction should list potential loss reduction activities it has identified in its planning process and describe its approach to evaluating these activities to select those that achieve the community's goals and objectives. Particular attention should be given to those mitigation activities that address existing and new buildings and infrastructure. Not all of the mitigation measures identified may ultimately be included in the community's plan due to prohibitive costs, scale, low benefit/cost analysis ratios, or other concerns. The process by which the community decides on particular mitigation measures must be described. The information will also be valuable as part of the alternative analysis for the National Environmental Policy Act (NEPA) review required if projects are federally funded.</p>

5.3 Mitigation Actions/Projects

The City of West Hollywood is only 1.9 square miles and has no waterways, freeways, bridges, or dams. The City is not in a high hazardous fire area. Although storms, flooding, extreme heat or winds can affect the City, the most likely hazard that could inflict devastating damage on the City is an earthquake. All City facilities have been built to code, and the City adopts a new building code every three years which includes updating seismic and structural requirements. The City has also completed a city-wide retrofit project where dozens of private and public buildings were retrofitted.

The Hazard Mitigation Planning Team reviewed the many mitigation projects that have already been conducted such as a City wide seismic retrofit project, the installation of battery back-ups for traffic signals at key intersections, and a Safety Element Update in 2002 for the City's General Plan. The Safety Element reviewed ground surface and shaking, seismically induced hazards, mudslides, landslides, expansive soils and rocks, collapsible soils, and ground subsidence. In addition, the Safety Element examined flood and inundation, urban fires, building inventory, emergency response, and post-disaster recovery.

The Hazard Mitigation Planning Team discussed the most likely hazards and potential mitigation projects at length. The team discussed modifying infrastructure, facilities, land use, seismic retrofitting, and updates to the general plan and the municipal code. Fortunately, there are no major issues at this time. The team will continue to meet and discuss the need for major mitigation projects as codes change, disasters occur, and the housing and commercial buildings age. While there is not a need for major mitigation projects or construction at this time, the team anticipates that there will likely be a need in the future.

Although the City of West Hollywood is small and does not require major structural projects (i.e., repairing a dam, etc.), the Planning Team did identify the following future mitigation actions.

Proposed New Project – High Priority:

1. Hazard Mitigation – Public Education Campaign

This project has been designated a high priority due to the results of a public opinion survey that the City conducted from April 5, 2004 – May 27, 2004. The online survey was posted on the City's website (www.weho.org) and email invitations were sent to a number of "stakeholder" groups including, but not limited to, West Hollywood residents associations, neighborhood watch groups, disaster volunteers and members of the West Hollywood Chamber of Commerce. In addition, notices were sent to neighborhood schools, the West Hollywood Library and the community center, city employees, council members, commissioners, advisory board members and emergency services personnel in the City of West Hollywood. There were no specific recruitment specifications except that respondents be "stakeholders" in the City of West Hollywood (residents, business owners/employees, property owners, city or county workers in West Hollywood, volunteers, etc.).

As might be expected, "earthquake" was the type of natural disaster most concerned about according to participants in the West Hollywood Disaster Mitigation Survey. Even though the City of West Hollywood cannot "stop the ground from shaking," survey participants suggested many ways for the City to alleviate some of their disaster concerns, including disseminate information on preparedness and mitigation, hold more classes/forums/drills, and ensure the availability of emergency preparedness kits.

Those who were aware and/or who participated in "preparedness" programs provided by the City were more likely to be prepared, i.e., have a Disaster Plan and/or Emergency Preparedness Kit at home/work. This means that there is an opportunity for the City to have a more prepared community by increasing awareness of and participation in City programs.

Name: Hazard Mitigation – Public Education Campaign

Description: The City of West Hollywood regularly communicates with its residents regarding emergency preparedness, but it does not have a formal program to do so regarding hazard mitigation. Many of the older brochures should be replaced, and an updated public education campaign could be employed.

Alternatives: Continue to disseminate information through normal venues including Neighborhood Watch, CERT, and other meetings.

Strategy: Create a public education campaign to encourage residents to properly

prepare for an emergency. Most answering the survey appeared to be pretty active in the City of West Hollywood, probably more so than the general public. The sample included members of neighborhood watch groups and residents' associations as well as members of the Chamber of Commerce. These organizations are a good starting place in terms of promoting the City's "preparedness" programs. The City may also want to consider some additional outreach to the central part of the City where awareness and program participation seemed lower than other areas. Outreach could include utilizing the City's website, Cable TV stations, public meetings, printed materials and advertising, and classes for constituents.

Status: Proposed

Responsible Department: Public Safety/Community Development

Completion Date: to be determined

Local Priority: High

Hazards Mitigated: earthquake (structural and non-structural measures), fire (brush clearance)

Total Cost: to be determined.

Cost/Benefit: The City is limited in its ability to accurately predict a costs/benefit analysis at this time. Staff does not have the resources to survey the public regarding issues such as noting how many property owners have conducted non-structural mitigation or brush clearance activities and predict the financial impact on owners then doing those activities. Based on the public opinion survey, the concern for earthquakes is high, and it seems that a public education campaign with funding for an evaluation of the program would still be beneficial.

Limitations: Funding for a city-wide public education campaign is severely limited. Grant funding would be necessary to move this project forward.

Proposed New Project – High Priority:

2. Traffic Signal – Battery Back-up

This project has been designated a high priority due to the need for working traffic signals during or after an emergency. Although small, the City of West Hollywood is extremely dense. Working signals will enable emergency personnel and others to navigate the City more easily during a power outage.

Name: Traffic Signal – Battery Back-up

Description: The City of West Hollywood's Transportation and Public Works Department has identified the need for working traffic signals during a power outage in order to assist first responders and residents.

Alternatives: Non-working traffic signals during power outages.

Strategy: Identify funding sources to continue installing battery back-ups to key intersections. The City has installed six to date and needs several more.

Status: Ongoing

Responsible Department: Department of Transportation and Public Works

Completion Date: to be determined

Local Priority: High

Hazards Mitigated: power failures due to any hazard

Total Cost: to be determined

Cost/Benefit: Implementation is very easy once funding is identified.

Limitations: Funding is severely limited. Grant funding would be necessary to move this project forward quickly.

Proposed New Project – High Priority:

3. West Hollywood Auditorium Generator Installation

This project has been designated a high priority. The West Hollywood Auditorium has been designated as the primary emergency shelter location for the community.

Name: West Hollywood Auditorium Generator Installation

Description: The City of West Hollywood's Facilities Division has identified the need for a generator for the Auditorium in case of a power failure due to an emergency.

Alternatives: Without power, the facility could not be utilized during an emergency.

Strategy: Identify resources to fund the project. The City has obtained funding for Phase One of the project, but it needs to find funding for subsequent phases.

Status: Ongoing

Responsible Department: Facilities, Maintenance, and Landscape Division

Completion Date: to be determined

Local Priority: High

Hazards Mitigated: power failures due to any hazard

Total Cost: to be determined; Phase One will cost \$14,000.

Cost/Benefit: Implementation of Phase One will begin in 2005 as funding has been identified.

Limitations: Funding is severely limited. Grant funding would be necessary to move this project forward quickly.

Proposed New Project – High Priority:

4. Employee Emergency Notification System

This project has been designated a high priority due to the need for quick and efficient response from City staff and officials.

Name: Employee Emergency Notification System

Description: The City of West Hollywood's Public Safety Division has identified the need for a quick and efficient way to recall staff during an emergency.

Alternatives: Use traditional methods (phone trees).

Strategy: Identify funding sources to purchase the use of 3N – National Notification Network and work with 3N and staff to implement. Staff has identified one year of funding so far.

Status: Ongoing

Responsible Department: Public Safety Division

Completion Date: to be determined

Local Priority: High

Hazards Mitigated: multi-hazard

Total Cost: approximately \$3000 per year

Cost/Benefit: Implementation is very easy once funding is identified.

Limitations: Funding is limited.

Proposed New Project – Medium Priority:

5. Strengthen Evacuation Plans for City Facilities

This project has been designated medium priority. As staff change, it would be beneficial to review and update current evacuation plans for all City facilities and then practice evacuations more often.

Name: Strengthen Evacuation Plans for City Facilities

Description: The City of West Hollywood's Public Safety Division would like to strengthen existing evacuation plans for City facilities.

Alternatives: Utilize current system of annual updates/drills.

Strategy: Identify staff to work with each facility to review their plans, update the plans as appropriate, and to practice their plans more often.

Status: Ongoing

Responsible Department: Public Safety Division

Completion Date: to be determined

Local Priority: Medium

Hazards Mitigated: Multi-Hazard

Total Cost: to be determined; largely staff time

Cost/Benefit: Implementation is very easy once funding is identified.

Limitations: Staff time is limited. If evacuation signs need replacing, funding will need to be identified.

Proposed New Project – Medium Priority:

6. Business Community Awareness Program

Although the business community would be addressed somewhat in Project #1, the Planning Team proposed a special outreach just to the business community regarding hazard mitigation.

Name: Business Community Awareness Program

Description: The Planning Team has identified the need for tailored outreach regarding hazard mitigation planning and activities for the business community.

Alternatives: Provide general community outreach information to the business community.

Strategy: Identify funding sources. Work with the Chamber of Commerce to conduct a needs assessment of the business community to establish a taskforce to guide the project.

Status: Proposed

Responsible Department: Public Safety Division

Completion Date: to be determined

Local Priority: Medium

Hazards Mitigated: Multi-hazard

Total Cost: to be determined

Cost/Benefit: Implementation is very easy once funding is identified.

Limitations: Funding for a city-wide business education campaign is severely limited. Grant funding would be necessary to move this project forward.

Proposed New Project – Medium Priority:

7. City Hall Roof Repair/Replacement

The Facilities Division has identified the need for repair and replacement of sections of the roof of City Hall on Santa Monica Boulevard.

Name: City Hall Roof Repair/Replacement

Description: The Planning Team has identified the need for repairs and partial replacement to the City Hall roof.

Alternatives: None.

Strategy: Identify funding sources. Work with maintenance and facilities to establish a timeline and to guide the project.

Status: Proposed

Responsible Department: Facilities, Maintenance, and Landscape Division

Completion Date: to be determined

Local Priority: Medium

Hazards Mitigated: Storms, Winds

Total Cost: to be determined

Cost/Benefit: Implementation is very easy once funding is identified.

Limitations: Funding is severely limited.

County of Los Angeles – Proposed New Project – High Priority:

8. County of Los Angeles Project – Obtain new LOMR after the completion of the Holly Hills Storm Drain Project

Although this is a project of the County of Los Angeles, the City of West Hollywood is monitoring its progress as it affects areas of West Hollywood.

It is anticipated that construction will be completed in the Spring of 2007. The County is completing all the hydrology analysis and paperwork to apply for the LOMR with FEMA. The LOMR should be issued simultaneous to the completion of the storm drain construction. At that point, the City of West Hollywood will no longer have any AO Flood Hazard zones, and all properties will be out of the 100-year flood plain.

Prioritization & Benefit Analysis of Mitigation Strategies

Hazard	Mitigation Strategy	Effect on Overall Risk to Life and Property	Ease of Implementation	Political and/or Community Support	Funding	Overall Priority
Multi-Hazard	Public Education Campaign	Medium	Moderate	High	Unfunded	High
Multi-Hazard	Continuation of Traffic Signal – Batter Back-up	Medium	Easy	High	Unfunded	High
Multi-Hazard	WH Auditorium Generator Installation	High	Easy	High	Partially Funded	High
Multi-Hazard	Employee Emergency Notification System	Medium	Easy	High	Partially Funded	High
Multi-Hazard	Strengthen Evacuation Plans for City Facilities	Medium	Moderate	High	Partially Funded	Medium
Multi-Hazard	Business Community Awareness Program	Medium	Moderate	High	Unfunded	Medium
Storms/Winds	City Hall Roof Repair/Replacement	Medium	Easy	High	Unfunded	Medium
Floods	County of LA – Obtain new LOMR	High	Moderate	High	Funded	High

Mitigation Strategies Overview Chart

Hazard	Mitigation Strategy	Responsible Department	Time Line	Plan Goal #1 Addressed?	Plan Goal #2 Addressed?	Plan Goal #3 Addressed?	Plan Goal #4 Addressed?	Plan Goal #5 Addressed?
Multi-Hazard	Public Education Campaign	Public Safety/ Public Information	2006		X	X		X
Multi-Hazard	Continuation of Traffic Signal – Batter Back-up	Transportation & Public Works	Depends on \$	X	X	X	X	
Multi-Hazard	WH Auditorium Generator Installation	Facilities	2005	X	X	X	X	
Multi-Hazard	Employee Emergency Notification System	Public Safety/ Public Information	2005	X				
Multi-Hazard	Strengthen Evacuation Plans for City Facilities	Public Safety	2006	X	X			
Multi-Hazard	Business Community Awareness Program	Public Safety/ Public Information	2006		X	X		X
Storms/Winds	City Hall Roof Repair/Replacement	Facilities	Depends on \$	X	X	X	X	
Floods	County of LA – Obtain New LOMR	County of LA	2007			X		

Completed and On-going Hazard Mitigation Projects:

Project Name	Responsible Department	Project Description	Hazard Mitigated	Completion Date	Cost
SMB Reconstruction	Transportation	Complete removal and replacement of three miles of roadway, curbs, gutters, sidewalks, landscaping, lighting, traffic signals, and utility (storm drain and sewer) rehabilitation. The completed project includes pedestrian visibility enhancements (roadway markings and signage; bicycle lane; traffic signal synchronization; and pavement repairs).	Earthquake, Flooding Provides for better emergency vehicle response to all hazards.	2/22/2002	Total Cost \$30,000,000 City \$14,000,000 County \$9,000,000 State \$7,000,000
Holly Hills Storm Drain	Transportation	Construction of a regional County Flood Control Facility (Storm Drain) to eliminate the FEMA designated AO Flood Hazard Zone. This regional project has been constructed in 8 phases. Phases #5, 6, 7, & 8 directly benefit the City of West Hollywood. Units 1, 2, 3, & 4 were to the south of the City in Los Angeles.	Flooding	1/1/2007	County \$36,000,000
Traffic Signal Battery Back-up	Transportation	Installed battery back-up systems for traffic signals at eight major intersections. Under power failure conditions, the traffic signals will continue to operate, rather than go black.	Provides for better emergency vehicle response to all hazards.	3/31/2004	Total Cost \$38,000 City \$20,000 State \$18,000
Traffic Signal Pre-emption for Sheriff's Station	Transportation	Installed pre-emption push button system at the Sheriff's Station to enable the officers to control traffic at the Santa Monica/San Vicente intersection and at the Santa Monica/PDC Road intersection during times of emergency.	Provides for better emergency vehicle response to all hazards.	1/2003	City \$20,000
Sidewalk Repair Program	Transportation	Annually have a staff person walk every sidewalk in the City to identify locations needing repairs to prevent trip/fall hazards and contract the repairs.	Provides for better evacuation & injury prevention	Annual each June	City \$200,000
Sewer Root Control	Transportation	Annually treat approximately 20% of the citywide sewer system with herbicide to retard tree root intrusion. This prevents sewer blockages and overflows which are a health and safety emergency.	Flooding	Annual each June	City \$60,000
New City Hall	Facilities	In 1995 the City purchased and constructed a new City Hall which included several seismic upgrades and installation of an Emergency Operation Center.	Earthquake EOC responds to all hazards.	1995	Replacement Cost \$7,419,851
Tree Trimming	Facilities	City street trees are pruned once every four years in residential areas and annually along commercial streets. In addition, trees in need of additional care are addressed by "service requests".	Fire, Winds, Landslides	Ongoing	City \$335,000

Continued

Project Name	Responsible Department	Project Description	Hazard Mitigated	Completion Date	Cost
EQ Insurance for City Hall	Finance	The City has secured earthquake insurance coverage for City Hall.	Earthquake	Ongoing	City \$54,578/year
Unreinforced Masonry Retrofit Program	Building & Safety	In 1990 the City identified 81 URM buildings for retrofitting.	Earthquake	Completed	Information not available
Annual Fire Department Structural Inspections	Fire Department	Personnel from Fire Stations 7 & 8 annually inspect each structure in the City.	All Hazards	Ongoing	County funded project/Utilizes Existing Personnel
Pitch & Purge	City Clerk	The City Clerk's Division annually conducts an employee "Pitch and Purge Day" where non-structural hazards are mitigated and non-essential items are disposed of or recycled.	Earthquake, Fire, Flood	Annual	City \$1000/year
Employee Emergency Backpacks	Public Safety	The Public Safety Division has provided all employees with an emergency backpack and restocks supplies annually.	All Hazards	Annual	City Initial investment: \$5000 Maintenance: \$500/year
Area Monitors	Public Safety	The Public Safety Division has identified several key staff to act as Area Monitors in City Hall to assist with employee preparedness. Area monitors conduct monthly fire extinguisher checks, maintain employee lists, practice evacuations, and assist the Public Safety Division with other preparedness and response activities.	All Hazards	Ongoing	City Approximately \$500/year

The ongoing benefits from conducting these projects greatly outweigh the financial and personnel costs. All projects attempt to mitigate most, if not all, hazards that West Hollywood may face.

City Staff make recommendations to the West Hollywood City Council regarding prioritization and funding of the above and future projects, yet the decision lies ultimately with the Councilmembers. Capital Improvement Projects and other Mitigation Projects receive public hearings as either part of the budgeting process or as individual staff items for City Council which allows for public input.

Evaluating the above projects is done by each responsible department by surveying staff assigned and members of the public, reviewing citizen complaints and public safety records, conducting a cost analysis.

With the exception of a few vacant parcels, the City of West Hollywood is completely developed. The Unreinforced Masonry Retrofit Program addressed mitigating existing structures against a seismic event, and the Holly Hills Storm Drain Project, when completed, will mitigate existing structures against a 100-year flood event. All new buildings and infrastructure have to comply with existing building codes and mitigation strategies. All plans for construction are reviewed by the Building and Safety Division and the Planning Division to ensure compliance with the Uniform Building Code, the General Plan, and City Ordinances.

Capital Improvement Projects

As discussed Section 5.1.2, capital projects are long-term improvement and maintenance programs designed to preserve the City's physical systems and facilities. Most of West Hollywood's capital improvement projects also address mitigation issues. The following information is provided as a supplement to the official mitigation projects above.

Capital Improvement Projects are rated according to the following priority levels:

- **Priority 1:** The project is urgent and/or mandated, and must be completed quickly. Failure to address the project will impact the health, safety, or welfare of the community, or have a significant impact on the financial well being of the City. The project must be initiated or financial/opportunity losses will result.
- **Priority 2:** The project is important and addressing it is necessary. The project impacts safety, law enforcement, health, welfare, economic base, and/or the quality of life in the community.
- **Priority 3:** The project would enhance the quality of life and would provide a benefit to the community. Completion of the project would improve the community providing cultural, recreational, and/or aesthetic effects.
- **Priority 4:** The project would be an improvement to the community, but need not be completed within a five-year capital improvement program.

Examples of current and proposed capital improvement projects for the City of West Hollywood include City Hall telephone system improvement, vehicle purchase, repairs of city buildings, emergency power generator installation, implementation of a park master plan, ADA implementation, street tree planting, construction of new parking lots, pedestrian safety, traffic control features, curb/sidewalk construction, pavement repair, traffic signal preemption for priority movement of emergency vehicles, sewer reconstruction, and catch basin retrofit.

As the ability of the City to raise revenues is limited by various initiatives, and programs and projects compete for ever scarcer resources, it is important to have a clear understanding of the City's capital needs, and it is imperative to strive to maintain a reasonable capital funding level which ensures the preservation of facilities and infrastructure. The cost/benefit analysis of these projects is conducted by the City's finance department which reviews prior insurance claims, estimates of planned work and staff time, and the predicted financial benefit of completed projects.

Other mitigation projects are rated in a similar manner to the City's capital improvement projects. The mitigation projects listed in the following chart have been funded by various resources, including federal funding, state funding, county funding, and local taxes. Future mitigation projects are dependent on the following factors, availability of funding, availability of personnel, consistency with the capital improvement project schedule, and the project's ability to mitigate an immediate hazard.

5.4 Implementation Strategy and Analysis of Mitigation Projects

<p><i>IFR REQUIREMENT</i> <i>§201.6(c)(3)(iii):</i></p>	<p>[The mitigation strategy section shall include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.</p>
<p><i>Explanation:</i></p>	<p>After outlining the mitigation measures to be included in the strategy, the local government should describe the method used to prioritize the order in which they intend to implement them. Prioritization shall include an emphasis on cost-benefit analysis with a focus on how effective the actions are expected to be with respect to their cost. The action plan should also identify those policies, programs, or resources that can be used to implement the strategy. This section should include the implementation timeline, the funding sources, when possible; and the agency or personnel responsible for carrying out the actions.</p>

5.4 Implementation Strategy and Analysis of Mitigation Projects

Prioritization & Benefit Analysis of Mitigation Strategies

Hazard	Mitigation Strategy	Effect on Overall Risk to Life and Property	Ease of Implementation	Political and/or Community Support	Funding	Overall Priority
Multi-Hazard	Public Education Campaign	Medium	Moderate	High	Unfunded	High
Multi-Hazard	Continuation of Traffic Signal – Batter Back-up	Medium	Easy	High	Unfunded	High
Multi-Hazard	WH Auditorium Generator Installation	High	Easy	High	Partially Funded	High
Multi-Hazard	Employee Emergency Notification System	Medium	Easy	High	Partially Funded	High
Multi-Hazard	Strengthen Evacuation Plans for City Facilities	Medium	Moderate	High	Partially Funded	Medium
Multi-Hazard	Business Community Awareness Program	Medium	Moderate	High	Unfunded	Medium
Storms/Winds	City Hall Roof Repair/Replacement	Medium	Easy	High	Unfunded	Medium
Floods	County of LA – Obtain new LOMR	High	Moderate	High	Funded	High

Mitigation Strategies Overview Chart

Hazard	Mitigation Strategy	Responsible Department	Time Line	Plan Goal #1 Addressed?	Plan Goal #2 Addressed?	Plan Goal #3 Addressed?	Plan Goal #4 Addressed?	Plan Goal #5 Addressed?
Multi-Hazard	Public Education Campaign	Public Safety/ Public Information	2006		X	X		X
Multi-Hazard	Continuation of Traffic Signal – Batter Back-up	Transportation & Public Works	Depends on \$	X	X	X	X	
Multi-Hazard	WH Auditorium Generator Installation	Facilities	2005	X	X	X	X	
Multi-Hazard	Employee Emergency Notification System	Public Safety/ Public Information	2005	X				
Multi-Hazard	Strengthen Evacuation Plans for City Facilities	Public Safety	2006	X	X			
Multi-Hazard	Business Community Awareness Program	Public Safety/ Public Information	2006		X	X		X
Storms/Winds	City Hall Roof Repair/Replacement	Facilities	Depends on \$	X	X	X	X	
Floods	County of LA – Obtain New LOMR	County of LA	2007			X		

Proposed New Project – High Priority:

1. Hazard Mitigation – Public Education Campaign

A broad public education campaign educating citizens on the multiple hazards that the City of West Hollywood faces and how they can prepare for, respond to, and recover from these hazards would be beneficial. (Please see Section 5.3 for a description of the proposed project.) The City currently does conduct education through various neighborhood groups and brochures, but it does not have one overall program to manage this education. Printed materials and presentations that can be aired on the local cable station would be a useful addition to existing resources. In addition, it would be beneficial to have different versions of the program tailored to both residents and business owners with Russian versions of each program.

Results from the web-based public opinion survey that the City of West Hollywood conducted during the spring of 2004 indicate that those residents and business owners who are aware of the City's preparedness programs are more likely to prepare themselves. For example, those residents who indicated that they are aware of preparedness classes and programs are more likely to have a disaster plan and emergency kit for their home. (Please see the Appendix for the survey's Executive Summary.) For this reason, the City has designated that public education is a mitigation priority.

While it is difficult to quantify and staff resources are limited to conduct a comprehensive cost-benefit review, it seems that the benefit of conducting a public

outreach campaign would mitigate against the costs of having a population that is not prepared. An appropriately prepared population would hopefully have mitigated non-structural damage, obtained proper insurance, and learned to care for themselves, their families, their property, and their neighborhoods in a disaster.

Ideas for Implementation:

- Identify a steering committee to manage and design the public education campaign.
- Develop printed materials and video pieces to educate the community on the various hazards and encourage individual, family, and business preparedness.
- Work with the social services division to identify especially vulnerable populations.
- Partner with residents, neighborhood groups, and businesses to effectively reach all members of the community.
- Procure emergency kits for distribution to those who participate in the public outreach program.
- Develop an evaluation component to the public outreach campaign

Current constraints to implementing this program include a lack of funding as well as a lack of City resources to design brochures and create video pieces.

2. Traffic Signal – Battery Back-up

This project has been designated a high priority due to the need for working traffic signals during or after an emergency. Although small, the City of West Hollywood is extremely dense. Working signals will enable emergency personnel and others to navigate the City more easily during a power outage.

Ideas for Implementation:

- Identify funding
- Identify staff to lead the project
- Identify and prioritize intersections
- Identify vendors
- Complete Installation
- Continue to monitor and evaluate the project

Current constraints to implementing this program include a lack of funding.

3. West Hollywood Auditorium Generator Installation

This project has been designated a high priority. The West Hollywood Auditorium has been designated as the primary emergency shelter location for the community.

Ideas for Implementation:

- Identify funding
- Identify staff to lead the project
- Identify vendors
- Complete Installation
- Continue to monitor and evaluate the project

Current constraints to implementing this program include a lack of funding. The initial phase of the project is funded.

4. Employee Emergency Notification System

This project has been designated a high priority due to the need for quick and efficient response from City staff and officials.

Ideas for Implementation:

- Identify funding
- Identify staff to lead the project
- Identify vendors
- Continue to monitor and evaluate the project

Current constraints to implementing this program include a lack of funding although if approved, the City will have secured grant funding to support one year of service.

5. Strengthen Evacuation Plans for City Facilities

This project has been designated medium priority. As staff change, it would be beneficial to review and update current evacuation plans for all City facilities and then practice evacuations more often.

Ideas for Implementation:

- Identify funding
- Identify staff to lead the project
- Conduct Training for Building Evacuation Coordinators
- Conduct Training for all staff
- Continue to monitor and evaluate the project

Current constraints to implementing this program include a lack of staff time.

6. Business Community Awareness Program

Although the business community would be addressed somewhat in Project #1, the Planning Team proposed a special outreach just to the business community regarding hazard mitigation.

This project has been designated medium priority. As staff change, it would be beneficial to review and update current evacuation plans for all City facilities and then practice evacuations more often.

Ideas for Implementation:

- Identify a steering committee to manage and design the public education campaign.
- Develop printed materials and video pieces to educate the community on the various hazards and encourage business preparedness.

- Partner with the Chamber of Commerce and others to effectively reach all businesses in the community.
- Develop an evaluation component to the public outreach campaign

Current constraints to implementing this program include a lack of funding.

7. City Hall Roof Repair/Replacement

The Facilities Division has identified the need for repair and replacement of sections of the roof of City Hall on Santa Monica Boulevard.

Ideas for Implementation:

- Identify funding
- Identify staff to lead the project
- Identify a vendor
- Complete work
- Continue to monitor and evaluate the project

Current constraints to implementing this program include a lack of funding.

8. County of Los Angeles Project – Obtain new LOMR after the completion of the Holly Hills Storm Drain Project

Although this is a project of the County of Los Angeles, the City of West Hollywood is monitoring its progress as it affects areas of West Hollywood.

It is anticipated that construction will be completed in the Spring of 2007, and a new LOMR will be issued at that time.

Proposed Capital Improvement Project Strategy:

Proposed capital improvement projects include increased parking opportunities, a park master plan, and transportation and public works improvements. Projects will be implemented as funding and personnel are identified to manage each project.

As the ability of the City to raise revenues is limited by various initiatives, and programs and projects compete for ever scarcer resources, it is important to have a clear understanding of the City's capital needs, and it is imperative to strive to maintain a reasonable capital funding level which ensures the preservation of facilities and infrastructure. The cost/benefit analysis of these projects is conducted by the City's finance department which reviews prior insurance claims, estimates of planned work and staff time, and the predicted financial benefit of completed projects.

Completed and On-going Project Implementation Strategy:

Existing mitigation and capital improvement projects are possible due to identified funding and personnel to appropriately manage each project. Please see pages 91-92 for a listing of completed and ongoing mitigation projects and page 93 for examples of ongoing capital improvement projects. The mitigation projects listed in

the chart on pages 91-92 have been funded by various resources, including federal funding, state funding, county funding, and local taxes. Existing mitigation projects are dependent on the following factors, availability of funding, availability of personnel, consistency with the capital improvement project schedule, and the project's ability to mitigate an immediate hazard.

5.5 Multi-Jurisdictional Mitigation Strategy

<i>IFR REQUIREMENT</i> <i>§201.6(c)(3)(iv):</i>	For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.
<i>Explanation:</i>	The multi-jurisdictional plan should contain a section that links the proposed mitigation actions to the applicable jurisdictions. Any jurisdiction within the planning area requesting approval or credit for the Mitigation Plan must be able to point to specific actions to be pursued.

5.5 Multi-Jurisdictional Mitigation Strategy

Not Applicable

Section 6 – Plan Maintenance

6.1 Monitoring, Evaluating and Updating the Plan

<p><i>IFR REQUIREMENT</i> <i>§201.6(c)(4)(i):</i></p>	<p>[The plan maintenance process shall include a section describing the] method and schedule of monitoring, evaluating and updating the mitigation plan within a five-year cycle.</p>
<p><i>Explanation:</i></p>	<p>The local jurisdiction should describe the system it has established to monitor the plan (this system may include periodic reports by agencies involved in implementing projects or activities; site visits, phone calls, and meetings conducted by the person responsible for overseeing the plan; and the preparation of an annual report that captures the highlights of the previously mentioned activities). The local jurisdiction plan should also include a description of how, when, and by whom the plan will be evaluated, and should include the criteria used to evaluate the plan. The evaluation should assess, among other things, whether: - The goals and objectives address current and expected conditions. - The nature or magnitude of risks has changed. - The current resources are appropriate for implementing the plan. - There are implementation problems, such as technical, political, legal or coordination issues with other agencies. - The outcomes have occurred as expected. - The agencies and other partners participated as proposed. Ideally, the Plan should be evaluated on an annual basis to determine the effectiveness of programs, and to reflect changes in land development or programs that may affect mitigation priorities. The plan should describe how, when, and under what conditions the plan will be updated and what agencies and interested parties will participate in the update. If plans are not updated annually, the plan should describe the schedule chosen by the community and provide an explanation for that schedule.</p>

6.1 Monitoring, Evaluating and Updating the Plan

Plan Last Updated: August 2004

Description of Plan Maintenance Procedures:

The Local Hazard Mitigation Plan will be evaluated on an annual basis to reflect changes in land development or new programs that may affect mitigation priorities. During the annual review, the core planning team will meet to reassess the hazard mitigation plan. Second, the core planning team will meet with key stakeholders, such as neighborhood groups, fire and law enforcement agencies, community groups, social service agencies, transportation and public works to gather updated

hazard mitigation information. After the initial review and key stakeholder meetings, Public Safety staff will present the plan with any recommendations from the core planning team to the Public Safety Commission. During the Public Safety Commission's review, members of the public will be able to attend a public meeting and voice any concerns or ideas for revisions to the plan. At that point, the core planning team will meet and make all changes necessary and present an updated document to the Public Safety Commission and the West Hollywood City Council. In addition, the Public Safety Division will informally involve members of the public as well through presentations at neighborhood meetings, key informant interviews, public meetings, and existing public safety programs. The Public Safety Division will also take the lead on submitting the City's updated plan to FEMA during the five year review process. Even though public hearings will be held during the annual review, a special public hearing will be held by the Public Safety Commission to illicit public input. This meeting will be widely advertised and open to residents, property owners, business owners, and other stake holders.

6.2 Implementation through Existing Programs

<i>IFR REQUIREMENT</i> <i>§201.6(c)(4)(ii):</i>	[The plan shall include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans when appropriate.
<i>Explanation:</i>	Jurisdictions should indicate how mitigation recommendations will be integrated into job descriptions, comprehensive plans, capital improvement plans, zoning and building codes, site reviews, permitting, and other planning tools, where such tools are the appropriate vehicles for implementation. Communities that do not have a comprehensive plan, or other similar planning mechanisms, should explain how the mitigation recommendations would be implemented. Further, for certain mitigation actions that may use other means of implementation, these other tools should be described.

6.2 Implementation through Existing Programs

Mitigation strategies are regularly reviewed through the City's existing programs, including General Plan review and updates, building and safety code review and updates, transportation and public works projects, commercial and residential code compliance, housing authority programs, capital improvement plans and projects, and emergency plan updates.

Since funding is limited, not all mitigation strategies will be possible soon. A chart of mitigation strategies will be reviewed by staff at regular intervals in order to identify funding and to incorporate work into other City projects when possible. For example, the Hazard Mitigation Planning team will work together during the City's budget process, capital improvement project planning, and other areas as appropriate to incorporate mitigation projects. Commercial and Residential Code Compliance, with assistance from the Planning and Building and Safety Divisions, will look for ways to strengthen the Municipal Code and other laws to support the City's mitigation strategies. In addition, there are several public meetings which will be used to encourage both public and private input and to adopt or incorporate mitigation projects into community outreach.

Please see the chart on the following page for a summary of the City's Existing Programs and the possibilities they provide for mitigation strategy incorporation.

Local Planning Mechanisms	Issues Addressed	Responsible Department	Time Frame	Possibility for Mitigation Strategy Incorporation
General Plan	Identifies Hazards and Impact, Land Use, Vehicular Transportation, Housing, Environmental	Community Development	Review in progress	Examine Plan for Ways to Incorporate Mitigation Strategies
Planning Commission Meetings	Land Use, Development	Community Development	Twice a month	Community Input
Public Safety Commission Meetings	Emergency Management, Hazard Identification	Public Safety	Once a month	Community Input
Emergency Plan	Identifies Hazards and Impact, Vulnerable Populations and Structures, Emergency Response Capabilities	Public Safety	Annual Review	Examine Plan for Ways to Incorporate Mitigation Strategies
Building and Safety Codes	Development, Construction Standards	Building and Safety	Every 3 years	Strengthen Code to Support Mitigation Strategies
Municipal Code	Identifies Hazards and Impact, Land Use, Vehicular Transportation, Housing, Environmental	Various Departments (Community Development, Administrative Services, etc.)	Updated as necessary	Strengthen Code to Support Mitigation Strategies
Commercial Code Compliance	Zoning, Encroachment	Commercial Code Compliance	Updated as necessary	Enforce Code
Residential Code Compliance	Property Maintenance Standards	Residential Code Compliance	Updated as necessary	Enforce Code
Fire Department Building Inspections	Fire and Life Safety	Fire Department	Annual Inspections	Enforce Code

5.3 Mitigation Actions/Projects

<p><i>IFR REQUIREMENT</i> §201.6(c)(3)(ii):</p>	<p>[The mitigation strategy shall include a] section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard with particular emphasis on new and existing buildings and infrastructure.</p>
<p><i>Explanation:</i></p>	<p>The local jurisdiction should list potential loss reduction activities it has identified in its planning process and describe its approach to evaluating these activities to select those that achieve the community's goals and objectives. Particular attention should be given to those mitigation activities that address existing and new buildings and infrastructure. Not all of the mitigation measures identified may ultimately be included in the community's plan due to prohibitive costs, scale, low benefit/cost analysis ratios, or other concerns. The process by which the community decides on particular mitigation measures must be described. The information will also be valuable as part of the alternative analysis for the National Environmental Policy Act (NEPA) review required if projects are federally funded.</p>

5.3 Mitigation Actions/Projects

The City of West Hollywood is only 1.9 square miles and has no waterways, freeways, bridges, or dams. The City is not in a high hazardous fire area. Although storms, flooding, extreme heat or winds can affect the City, the most likely hazard that could inflict devastating damage on the City is an earthquake. All City facilities have been built to code, and the City adopts a new building code every three years which includes updating seismic and structural requirements. The City has also completed a city-wide retrofit project where dozens of private and public buildings were retrofitted.

The Hazard Mitigation Planning Team reviewed the many mitigation projects that have already been conducted such as a City wide seismic retrofit project, the installation of battery back-ups for traffic signals at key intersections, and a Safety Element Update in 2002 for the City's General Plan. The Safety Element reviewed ground surface and shaking, seismically induced hazards, mudslides, landslides, expansive soils and rocks, collapsible soils, and ground subsidence. In addition, the Safety Element examined flood and inundation, urban fires, building inventory, emergency response, and post-disaster recovery.

The Hazard Mitigation Planning Team discussed the most likely hazards and potential mitigation projects at length. The team discussed modifying infrastructure, facilities, land use, seismic retrofitting, and updates to the general plan and the municipal code. Fortunately, there are no major issues at this time. The team will continue to meet and discuss the need for major mitigation projects as codes change, disasters occur, and the

housing and commercial buildings age. While there is not a need for major mitigation projects or construction at this time, the team anticipates that there will likely be a need in the future.

Although the City of West Hollywood is small and does not require major structural projects (i.e., repairing a dam, etc.), the Planning Team did identify the following future mitigation actions.

Proposed New Project – High Priority:

1. Hazard Mitigation – Public Education Campaign

This project has been designated a high priority due to the results of a public opinion survey that the City conducted from April 5, 2004 – May 27, 2004. The online survey was posted on the City's website (www.weho.org) and email invitations were sent to a number of "stakeholder" groups including, but not limited to, West Hollywood residents associations, neighborhood watch groups, disaster volunteers and members of the West Hollywood Chamber of Commerce. In addition, notices were sent to neighborhood schools, the West Hollywood Library and the community center, city employees, council members, commissioners, advisory board members and emergency services personnel in the City of West Hollywood. There were no specific recruitment specifications except that respondents be "stakeholders" in the City of West Hollywood (residents, business owners/employees, property owners, city or county workers in West Hollywood, volunteers, etc.).

As might be expected, "earthquake" was the type of natural disaster most concerned about according to participants in the West Hollywood Disaster Mitigation Survey. Even though the City of West Hollywood cannot "stop the ground from shaking," survey participants suggested many ways for the City to alleviate some of their disaster concerns, including disseminate information on preparedness and mitigation, hold more classes/forums/drills, and ensure the availability of emergency preparedness kits.

Those who were aware and/or who participated in "preparedness" programs provided by the City were more likely to be prepared, i.e., have a Disaster Plan and/or Emergency Preparedness Kit at home/work. This means that there is an opportunity for the City to have a more prepared community by increasing awareness of and participation in City programs.

Name: Hazard Mitigation – Public Education Campaign

Description: The City of West Hollywood regularly communicates with its residents regarding emergency preparedness, but it does not have a formal program to do so regarding hazard mitigation. Many of the older brochures should be replaced, and an updated public education campaign could be employed.

Alternatives: Continue to disseminate information through normal venues including Neighborhood Watch, CERT, and other meetings.

Strategy: Create a public education campaign to encourage residents to properly prepare for an emergency. Most answering the survey appeared to be pretty active in the City of West Hollywood, probably more so than the general public. The sample included members of neighborhood watch groups

and residents' associations as well as members of the Chamber of Commerce. These organizations are a good starting place in terms of promoting the City's "preparedness" programs. The City may also want to consider some additional outreach to the central part of the City where awareness and program participation seemed lower than other areas. Outreach could include utilizing the City's website, Cable TV stations, public meetings, printed materials and advertising, and classes for constituents.

Status: Proposed

Responsible Department: Public Safety/Community Development

Completion Date: to be determined

Local Priority: High

Hazards Mitigated: earthquake (structural and non-structural measures), fire (brush clearance)

Total Cost: to be determined.

Cost/Benefit: The City is limited in its ability to accurately predict a costs/benefit analysis at this time. Staff does not have the resources to survey the public regarding issues such as noting how many property owners have conducted non-structural mitigation or brush clearance activities and predict the financial impact on owners then doing those activities. Based on the public opinion survey, the concern for earthquakes is high, and it seems that a public education campaign with funding for an evaluation of the program would still be beneficial.

Limitations: Funding for a city-wide public education campaign is severely limited. Grant funding would be necessary to move this project forward.

Proposed New Project – High Priority:

2. Traffic Signal – Battery Back-up

This project has been designated a high priority due to the need for working traffic signals during or after an emergency. Although small, the City of West Hollywood is extremely dense. Working signals will enable emergency personnel and others to navigate the City more easily during a power outage.

Name: Traffic Signal – Battery Back-up

Description: The City of West Hollywood's Transportation and Public Works Department has identified the need for working traffic signals during a power outage in order to assist first responders and residents.

Alternatives: Non-working traffic signals during power outages.

Strategy: Identify funding sources to continue installing battery back-ups to key intersections. The City has installed six to date and needs several more.

Status: Ongoing

Responsible Department: Department of Transportation and Public Works

Completion Date: to be determined

Local Priority: High

Hazards Mitigated: power failures due to any hazard

Total Cost: to be determined

Cost/Benefit: Implementation is very easy once funding is identified.

Limitations: Funding is severely limited. Grant funding would be necessary to move this project forward quickly.

Proposed New Project – High Priority:

3. West Hollywood Auditorium Generator Installation

This project has been designated a high priority. The West Hollywood Auditorium has been designated as the primary emergency shelter location for the community.

Name: West Hollywood Auditorium Generator Installation

Description: The City of West Hollywood's Facilities Division has identified the need for a generator for the Auditorium in case of a power failure due to an emergency.

Alternatives: Without power, the facility could not be utilized during an emergency.

Strategy: Identify resources to fund the project. The City has obtained funding for Phase One of the project, but it needs to find funding for subsequent phases.

Status: Ongoing

Responsible Department: Facilities, Maintenance, and Landscape Division

Completion Date: to be determined

Local Priority: High

Hazards Mitigated: power failures due to any hazard

Total Cost: to be determined; Phase One will cost \$14,000.

Cost/Benefit: Implementation of Phase One will begin in 2005 as funding has been identified.

Limitations: Funding is severely limited. Grant funding would be necessary to move this project forward quickly.

Proposed New Project – High Priority:

4. Employee Emergency Notification System

This project has been designated a high priority due to the need for quick and efficient response from City staff and officials.

Name: Employee Emergency Notification System

Description: The City of West Hollywood's Public Safety Division has identified the need for a quick and efficient way to recall staff during an emergency.

Alternatives: Use traditional methods (phone trees).

Strategy: Identify funding sources to purchase the use of 3N – National Notification Network and work with 3N and staff to implement. Staff has identified one year of funding so far.

Status: Ongoing

Responsible Department: Public Safety Division

Completion Date: to be determined

Local Priority: High

Hazards Mitigated: multi-hazard

Total Cost: approximately \$3000 per year

Cost/Benefit: Implementation is very easy once funding is identified.

Limitations: Funding is limited.

Proposed New Project – Medium Priority:

5. Strengthen Evacuation Plans for City Facilities

This project has been designated medium priority. As staff change, it would be beneficial to review and update current evacuation plans for all City facilities and then practice evacuations more often.

Name: Strengthen Evacuation Plans for City Facilities

Description: The City of West Hollywood's Public Safety Division would like to strengthen existing evacuation plans for City facilities.

Alternatives: Utilize current system of annual updates/drills.

Strategy: Identify staff to work with each facility to review their plans, update the plans as appropriate, and to practice their plans more often.

Status: Ongoing

Responsible Department: Public Safety Division

Completion Date: to be determined

Local Priority: Medium

Hazards Mitigated: Multi-Hazard

Total Cost: to be determined; largely staff time

Cost/Benefit: Implementation is very easy once funding is identified.

Limitations: Staff time is limited. If evacuation signs need replacing, funding will need to be identified.

Proposed New Project – Medium Priority:

6. Business Community Awareness Program

Although the business community would be addressed somewhat in Project #1, the Planning Team proposed a special outreach just to the business community regarding hazard mitigation.

Name: Business Community Awareness Program

Description: The Planning Team has identified the need for tailored outreach regarding hazard mitigation planning and activities for the business community.

Alternatives: Provide general community outreach information to the business community.

Strategy: Identify funding sources. Work with the Chamber of Commerce to conduct a needs assessment of the business community to establish a taskforce to guide the project.

Status: Proposed

Responsible Department: Public Safety Division

Completion Date: to be determined

Local Priority: Medium

Hazards Mitigated: Multi-hazard

Total Cost: to be determined

Cost/Benefit: Implementation is very easy once funding is identified.

Limitations: Funding for a city-wide business education campaign is severely limited. Grant funding would be necessary to move this project forward.

Proposed New Project – Medium Priority:

7. City Hall Roof Repair/Replacement

The Facilities Division has identified the need for repair and replacement of sections of the roof of City Hall on Santa Monica Boulevard.

Name: City Hall Roof Repair/Replacement

Description: The Planning Team has identified the need for repairs and partial replacement to the City Hall roof.

Alternatives: None.

Strategy: Identify funding sources. Work with maintenance and facilities to establish a timeline and to guide the project.

Status: Proposed

Responsible Department: Facilities, Maintenance, and Landscape Division

Completion Date: to be determined

Local Priority: Medium

Hazards Mitigated: Storms, Winds

Total Cost: to be determined

Cost/Benefit: Implementation is very easy once funding is identified.

Limitations: Funding is severely limited.

County of Los Angeles – Proposed New Project – High Priority:

8. County of Los Angeles Project – Obtain new LOMR after the completion of the Holly Hills Storm Drain Project

Although this is a project of the County of Los Angeles, the City of West Hollywood is monitoring its progress as it affects areas of West Hollywood.

It is anticipated that construction will be completed in the Spring of 2007. The County is completing all the hydrology analysis and paperwork to apply for the LOMR with FEMA. The LOMR should be issued simultaneous to the completion of the storm drain construction. At that point, the City of West Hollywood will no longer have any AO Flood Hazard zones, and all properties will be out of the 100-year flood plain.

Prioritization & Benefit Analysis of Mitigation Strategies

Hazard	Mitigation Strategy	Effect on Overall Risk to Life and Property	Ease of Implementation	Political and/or Community Support	Funding	Overall Priority
Multi-Hazard	Public Education Campaign	Medium	Moderate	High	Unfunded	High
Multi-Hazard	Continuation of Traffic Signal – Batter Back-up	Medium	Easy	High	Unfunded	High
Multi-Hazard	WH Auditorium Generator Installation	High	Easy	High	Partially Funded	High
Multi-Hazard	Employee Emergency Notification System	Medium	Easy	High	Partially Funded	High
Multi-Hazard	Strengthen Evacuation Plans for City Facilities	Medium	Moderate	High	Partially Funded	Medium
Multi-Hazard	Business Community Awareness Program	Medium	Moderate	High	Unfunded	Medium
Storms/Winds	City Hall Roof Repair/Replacement	Medium	Easy	High	Unfunded	Medium
Floods	County of LA – Obtain new LOMR	High	Moderate	High	Funded	High

Mitigation Strategies Overview Chart

Hazard	Mitigation Strategy	Responsible Department	Time Line	Plan Goal #1 Addressed?	Plan Goal #2 Addressed?	Plan Goal #3 Addressed?	Plan Goal #4 Addressed?	Plan Goal #5 Addressed?
Multi-Hazard	Public Education Campaign	Public Safety/ Public Information	2006		X	X		X
Multi-Hazard	Continuation of Traffic Signal – Batter Back-up	Transportation & Public Works	Depends on \$	X	X	X	X	
Multi-Hazard	WH Auditorium Generator Installation	Facilities	2005	X	X	X	X	
Multi-Hazard	Employee Emergency Notification System	Public Safety/ Public Information	2005	X				
Multi-Hazard	Strengthen Evacuation Plans for City Facilities	Public Safety	2006	X	X			
Multi-Hazard	Business Community Awareness Program	Public Safety/ Public Information	2006		X	X		X
Storms/Winds	City Hall Roof Repair/Replacement	Facilities	Depends on \$	X	X	X	X	
Floods	County of LA – Obtain New LOMR	County of LA	2007			X		

Completed and On-going Hazard Mitigation Projects:

Project Name	Responsible Department	Project Description	Hazard Mitigated	Completion Date	Cost
SMB Reconstruction	Transportation	Complete removal and replacement of three miles of roadway, curbs, gutters, sidewalks, landscaping, lighting, traffic signals, and utility (storm drain and sewer) rehabilitation. The completed project includes pedestrian visibility enhancements (roadway markings and signage; bicycle lane; traffic signal synchronization; and pavement repairs).	Earthquake, Flooding Provides for better emergency vehicle response to all hazards.	2/22/2002	Total Cost \$30,000,000 City \$14,000,000 County \$9,000,000 State \$7,000,000
Holly Hills Storm Drain	Transportation	Construction of a regional County Flood Control Facility (Storm Drain) to eliminate the FEMA designated AO Flood Hazard Zone. This regional project has been constructed in 8 phases. Phases #5, 6, 7, & 8 directly benefit the City of West Hollywood. Units 1, 2, 3, & 4 were to the south of the City in Los Angeles.	Flooding	1/1/2007	County \$36,000,000
Traffic Signal Battery Back-up	Transportation	Installed battery back-up systems for traffic signals at eight major intersections. Under power failure conditions, the traffic signals will continue to operate, rather than go black.	Provides for better emergency vehicle response to all hazards.	3/31/2004	Total Cost \$38,000 City \$20,000 State \$18,000
Traffic Signal Pre-emption for Sheriff's Station	Transportation	Installed pre-emption push button system at the Sheriff's Station to enable the officers to control traffic at the Santa Monica/San Vicente intersection and at the Santa Monica/PDC Road intersection during times of emergency.	Provides for better emergency vehicle response to all hazards.	1/2003	City \$20,000
Sidewalk Repair Program	Transportation	Annually have a staff person walk every sidewalk in the City to identify locations needing repairs to prevent trip/fall hazards and contract the repairs.	Provides for better evacuation & injury prevention	Annual each June	City \$200,000
Sewer Root Control	Transportation	Annually treat approximately 20% of the citywide sewer system with herbicide to retard tree root intrusion. This prevents sewer blockages and overflows which are a health and safety emergency.	Flooding	Annual each June	City \$60,000
New City Hall	Facilities	In 1995 the City purchased and constructed a new City Hall which included several seismic upgrades and installation of an Emergency Operation Center.	Earthquake EOC responds to all hazards.	1995	Replacement Cost \$7,419,851
Tree Trimming	Facilities	City street trees are pruned once every four years in residential areas and annually along commercial streets. In addition, trees in need of additional care are addressed by "service requests".	Fire, Winds, Landslides	Ongoing	City \$335,000

Continued

Project Name	Responsible Department	Project Description	Hazard Mitigated	Completion Date	Cost
EQ Insurance for City Hall	Finance	The City has secured earthquake insurance coverage for City Hall.	Earthquake	Ongoing	City \$54,578/year
Unreinforced Masonry Retrofit Program	Building & Safety	In 1990 the City identified 81 URM buildings for retrofitting.	Earthquake	Completed	Information not available
Annual Fire Department Structural Inspections	Fire Department	Personnel from Fire Stations 7 & 8 annually inspect each structure in the City.	All Hazards	Ongoing	County funded project/Utilizes Existing Personnel
Pitch & Purge	City Clerk	The City Clerk's Division annually conducts an employee "Pitch and Purge Day" where non-structural hazards are mitigated and non-essential items are disposed of or recycled.	Earthquake, Fire, Flood	Annual	City \$1000/year
Employee Emergency Backpacks	Public Safety	The Public Safety Division has provided all employees with an emergency backpack and restocks supplies annually.	All Hazards	Annual	City Initial investment: \$5000 Maintenance: \$500/year
Area Monitors	Public Safety	The Public Safety Division has identified several key staff to act as Area Monitors in City Hall to assist with employee preparedness. Area monitors conduct monthly fire extinguisher checks, maintain employee lists, practice evacuations, and assist the Public Safety Division with other preparedness and response activities.	All Hazards	Ongoing	City Approximately \$500/year

The ongoing benefits from conducting these projects greatly outweigh the financial and personnel costs. All projects attempt to mitigate most, if not all, hazards that West Hollywood may face.

City Staff make recommendations to the West Hollywood City Council regarding prioritization and funding of the above and future projects, yet the decision lies ultimately with the Councilmembers. Capital Improvement Projects and other Mitigation Projects receive public hearings as either part of the budgeting process or as individual staff items for City Council which allows for public input.

Evaluating the above projects is done by each responsible department by surveying staff assigned and members of the public, reviewing citizen complaints and public safety records, conducting a cost analysis.

With the exception of a few vacant parcels, the City of West Hollywood is completely developed. The Unreinforced Masonry Retrofit Program addressed mitigating existing structures against a seismic event, and the Holly Hills Storm Drain Project, when completed, will mitigate existing structures against a 100-year flood event. All new buildings and infrastructure have to comply with existing building codes and mitigation strategies. All plans for construction are reviewed by the Building and Safety Division and the Planning Division to ensure compliance with the Uniform Building Code, the General Plan, and City Ordinances.

Capital Improvement Projects

As discussed Section 5.1.2, capital projects are long-term improvement and maintenance programs designed to preserve the City's physical systems and facilities. Most of West Hollywood's capital improvement projects also address mitigation issues. The following information is provided as a supplement to the official mitigation projects above.

Capital Improvement Projects are rated according to the following priority levels:

- **Priority 1:** The project is urgent and/or mandated, and must be completed quickly. Failure to address the project will impact the health, safety, or welfare of the community, or have a significant impact on the financial well being of the City. The project must be initiated or financial/opportunity losses will result.
- **Priority 2:** The project is important and addressing it is necessary. The project impacts safety, law enforcement, health, welfare, economic base, and/or the quality of life in the community.
- **Priority 3:** The project would enhance the quality of life and would provide a benefit to the community. Completion of the project would improve the community providing cultural, recreational, and/or aesthetic effects.
- **Priority 4:** The project would be an improvement to the community, but need not be completed within a five-year capital improvement program.

Examples of current and proposed capital improvement projects for the City of West Hollywood include City Hall telephone system improvement, vehicle purchase, repairs of city buildings, emergency power generator installation, implementation of a park master plan, ADA implementation, street tree planting, construction of new parking lots, pedestrian safety, traffic control features, curb/sidewalk construction, pavement repair, traffic signal preemption for priority movement of emergency vehicles, sewer reconstruction, and catch basin retrofit.

As the ability of the City to raise revenues is limited by various initiatives, and programs and projects compete for ever scarcer resources, it is important to have a clear understanding of the City's capital needs, and it is imperative to strive to maintain a reasonable capital funding level which ensures the preservation of facilities and infrastructure. The cost/benefit analysis of these projects is conducted by the City's finance department which reviews prior insurance claims, estimates of planned work and staff time, and the predicted financial benefit of completed projects.

Other mitigation projects are rated in a similar manner to the City's capital improvement projects. The mitigation projects listed in the following chart have been funded by various resources, including federal funding, state funding, county funding, and local taxes. Future mitigation projects are dependent on the following factors, availability of funding, availability of personnel, consistency with the capital improvement project schedule, and the project's ability to mitigate an immediate hazard.

5.4 Implementation Strategy and Analysis of Mitigation Projects

IFR REQUIREMENT <i>§201.6(c)(3)(iii):</i>	[The mitigation strategy section shall include] an action plan describing how the actions identified in section (c)(3)(ii) will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.
<i>Explanation:</i>	After outlining the mitigation measures to be included in the strategy, the local government should describe the method used to prioritize the order in which they intend to implement them. Prioritization shall include an emphasis on cost-benefit analysis with a focus on how effective the actions are expected to be with respect to their cost. The action plan should also identify those policies, programs, or resources that can be used to implement the strategy. This section should include the implementation timeline, the funding sources, when possible; and the agency or personnel responsible for carrying out the actions.

5.4 Implementation Strategy and Analysis of Mitigation Projects

Prioritization & Benefit Analysis of Mitigation Strategies

Hazard	Mitigation Strategy	Effect on Overall Risk to Life and Property	Ease of Implementation	Political and/or Community Support	Funding	Overall Priority
Multi-Hazard	Public Education Campaign	Medium	Moderate	High	Unfunded	High
Multi-Hazard	Continuation of Traffic Signal – Batter Back-up	Medium	Easy	High	Unfunded	High
Multi-Hazard	WH Auditorium Generator Installation	High	Easy	High	Partially Funded	High
Multi-Hazard	Employee Emergency Notification System	Medium	Easy	High	Partially Funded	High
Multi-Hazard	Strengthen Evacuation Plans for City Facilities	Medium	Moderate	High	Partially Funded	Medium
Multi-Hazard	Business Community Awareness Program	Medium	Moderate	High	Unfunded	Medium
Storms/Winds	City Hall Roof Repair/Replacement	Medium	Easy	High	Unfunded	Medium
Floods	County of LA – Obtain new LOMR	High	Moderate	High	Funded	High

Mitigation Strategies Overview Chart

Hazard	Mitigation Strategy	Responsible Department	Time Line	Plan Goal #1 Addressed?	Plan Goal #2 Addressed?	Plan Goal #3 Addressed?	Plan Goal #4 Addressed?	Plan Goal #5 Addressed?
Multi-Hazard	Public Education Campaign	Public Safety/ Public Information	2006		X	X		X
Multi-Hazard	Continuation of Traffic Signal – Batter Back-up	Transportation & Public Works	Depends on \$	X	X	X	X	
Multi-Hazard	WH Auditorium Generator Installation	Facilities	2005	X	X	X	X	
Multi-Hazard	Employee Emergency Notification System	Public Safety/ Public Information	2005	X				
Multi-Hazard	Strengthen Evacuation Plans for City Facilities	Public Safety	2006	X	X			
Multi-Hazard	Business Community Awareness Program	Public Safety/ Public Information	2006		X	X		X
Storms/Winds	City Hall Roof Repair/Replacement	Facilities	Depends on \$	X	X	X	X	
Floods	County of LA – Obtain New LOMR	County of LA	2007			X		

Proposed New Project – High Priority:

1. Hazard Mitigation – Public Education Campaign

A broad public education campaign educating citizens on the multiple hazards that the City of West Hollywood faces and how they can prepare for, respond to, and recover from these hazards would be beneficial. (Please see Section 5.3 for a description of the proposed project.) The City currently does conduct education through various neighborhood groups and brochures, but it does not have one overall program to manage this education. Printed materials and presentations that can be aired on the local cable station would be a useful addition to existing resources. In addition, it would be beneficial to have different versions of the program tailored to both residents and business owners with Russian versions of each program.

Results from the web-based public opinion survey that the City of West Hollywood conducted during the spring of 2004 indicate that those residents and business owners who are aware of the City's preparedness programs are more likely to prepare themselves. For example, those residents who indicated that they are aware of preparedness classes and programs are more likely to have a disaster plan and emergency kit for their home. (Please see the Appendix for the survey's Executive Summary.) For this reason, the City has designated that public education is a mitigation priority.

While it is difficult to quantify and staff resources are limited to conduct a comprehensive cost-benefit review, it seems that the benefit of conducting a public outreach campaign would mitigate against the costs of having a population that is not prepared. An appropriately prepared population would hopefully have mitigated non-structural damage,

obtained proper insurance, and learned to care for themselves, their families, their property, and their neighborhoods in a disaster.

Ideas for Implementation:

- Identify a steering committee to manage and design the public education campaign.
- Develop printed materials and video pieces to educate the community on the various hazards and encourage individual, family, and business preparedness.
- Work with the social services division to identify especially vulnerable populations.
- Partner with residents, neighborhood groups, and businesses to effectively reach all members of the community.
- Procure emergency kits for distribution to those who participate in the public outreach program.
- Develop an evaluation component to the public outreach campaign

Current constraints to implementing this program include a lack of funding as well as a lack of City resources to design brochures and create video pieces.

2. Traffic Signal – Battery Back-up

This project has been designated a high priority due to the need for working traffic signals during or after an emergency. Although small, the City of West Hollywood is extremely dense. Working signals will enable emergency personnel and others to navigate the City more easily during a power outage.

Ideas for Implementation:

- Identify funding
- Identify staff to lead the project
- Identify and prioritize intersections
- Identify vendors
- Complete Installation
- Continue to monitor and evaluate the project

Current constraints to implementing this program include a lack of funding.

3. West Hollywood Auditorium Generator Installation

This project has been designated a high priority. The West Hollywood Auditorium has been designated as the primary emergency shelter location for the community.

Ideas for Implementation:

- Identify funding
- Identify staff to lead the project
- Identify vendors
- Complete Installation
- Continue to monitor and evaluate the project

Current constraints to implementing this program include a lack of funding. The initial phase of the project is funded.

4. Employee Emergency Notification System

This project has been designated a high priority due to the need for quick and efficient response from City staff and officials.

Ideas for Implementation:

- Identify funding
- Identify staff to lead the project
- Identify vendors
- Continue to monitor and evaluate the project

Current constraints to implementing this program include a lack of funding although if approved, the City will have secured grant funding to support one year of service.

5. Strengthen Evacuation Plans for City Facilities

This project has been designated medium priority. As staff change, it would be beneficial to review and update current evacuation plans for all City facilities and then practice evacuations more often.

Ideas for Implementation:

- Identify funding
- Identify staff to lead the project
- Conduct Training for Building Evacuation Coordinators
- Conduct Training for all staff
- Continue to monitor and evaluate the project

Current constraints to implementing this program include a lack of staff time.

6. Business Community Awareness Program

Although the business community would be addressed somewhat in Project #1, the Planning Team proposed a special outreach just to the business community regarding hazard mitigation.

This project has been designated medium priority. As staff change, it would be beneficial to review and update current evacuation plans for all City facilities and then practice evacuations more often.

Ideas for Implementation:

- Identify a steering committee to manage and design the public education campaign.
- Develop printed materials and video pieces to educate the community on the various hazards and encourage business preparedness.
- Partner with the Chamber of Commerce and others to effectively reach all businesses in the community.
- Develop an evaluation component to the public outreach campaign

Current constraints to implementing this program include a lack of funding.

7. City Hall Roof Repair/Replacement

The Facilities Division has identified the need for repair and replacement of sections of the roof of City Hall on Santa Monica Boulevard.

Ideas for Implementation:

- Identify funding
- Identify staff to lead the project
- Identify a vendor
- Complete work
- Continue to monitor and evaluate the project

Current constraints to implementing this program include a lack of funding.

8. County of Los Angeles Project – Obtain new LOMR after the completion of the Holly Hills Storm Drain Project

Although this is a project of the County of Los Angeles, the City of West Hollywood is monitoring its progress as it affects areas of West Hollywood.

It is anticipated that construction will be completed in the Spring of 2007, and a new LOMR will be issued at that time.

Proposed Capital Improvement Project Strategy:

Proposed capital improvement projects include increased parking opportunities, a park master plan, and transportation and public works improvements. Projects will be implemented as funding and personnel are identified to manage each project.

As the ability of the City to raise revenues is limited by various initiatives, and programs and projects compete for ever scarcer resources, it is important to have a clear understanding of the City's capital needs, and it is imperative to strive to maintain a reasonable capital funding level which ensures the preservation of facilities and infrastructure. The cost/benefit analysis of these projects is conducted by the City's finance department which reviews prior insurance claims, estimates of planned work and staff time, and the predicted financial benefit of completed projects.

Completed and On-going Project Implementation Strategy:

Existing mitigation and capital improvement projects are possible due to identified funding and personnel to appropriately manage each project. Please see pages 91-92 for a listing of completed and ongoing mitigation projects and page 93 for examples of ongoing capital improvement projects. The mitigation projects listed in the chart on pages 91-92 have been funded by various resources, including federal funding, state funding, county funding, and local taxes. Existing mitigation projects are dependent on the following factors, availability of funding, availability of personnel, consistency with the capital improvement project schedule, and the project's ability to mitigate an immediate hazard.

5.5 Multi-Jurisdictional Mitigation Strategy

<i>IFR REQUIREMENT</i> <i>§201.6(c)(3)(iv):</i>	For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.
<i>Explanation:</i>	The multi-jurisdictional plan should contain a section that links the proposed mitigation actions to the applicable jurisdictions. Any jurisdiction within the planning area requesting approval or credit for the Mitigation Plan must be able to point to specific actions to be pursued.

5.5 Multi-Jurisdictional Mitigation Strategy

Not Applicable

Section 6 – Plan Maintenance

6.1 Monitoring, Evaluating and Updating the Plan

<p><i>IFR REQUIREMENT</i> <i>§201.6(c)(4)(i):</i></p>	<p>[The plan maintenance process shall include a section describing the] method and schedule of monitoring, evaluating and updating the mitigation plan within a five-year cycle.</p>
<p><i>Explanation:</i></p>	<p>The local jurisdiction should describe the system it has established to monitor the plan (this system may include periodic reports by agencies involved in implementing projects or activities; site visits, phone calls, and meetings conducted by the person responsible for overseeing the plan; and the preparation of an annual report that captures the highlights of the previously mentioned activities). The local jurisdiction plan should also include a description of how, when, and by whom the plan will be evaluated, and should include the criteria used to evaluate the plan. The evaluation should assess, among other things, whether:</p> <ul style="list-style-type: none"> - The goals and objectives address current and expected conditions. - The nature or magnitude of risks has changed. - The current resources are appropriate for implementing the plan. - There are implementation problems, such as technical, political, legal or coordination issues with other agencies. - The outcomes have occurred as expected. - The agencies and other partners participated as proposed. <p>Ideally, the Plan should be evaluated on an annual basis to determine the effectiveness of programs, and to reflect changes in land development or programs that may affect mitigation priorities. The plan should describe how, when, and under what conditions the plan will be updated and what agencies and interested parties will participate in the update. If plans are not updated annually, the plan should describe the schedule chosen by the community and provide an explanation for that schedule.</p>

6.1 Monitoring, Evaluating and Updating the Plan

Plan Last Updated: August 2004

Description of Plan Maintenance Procedures:

The Local Hazard Mitigation Plan will be evaluated on an annual basis to reflect changes in land development or new programs that may affect mitigation priorities. During the annual review, the core planning team will meet to reassess the hazard mitigation plan. Second, the core planning team will meet with key stakeholders, such as neighborhood groups, fire and law enforcement agencies, community groups, social service agencies, transportation and public works to gather updated hazard mitigation information. After the initial review and key stakeholder meetings, Public Safety staff will present the plan with any recommendations from the core planning team to the Public Safety Commission. During the

Public Safety Commission's review, members of the public will be able to attend a public meeting and voice any concerns or ideas for revisions to the plan. At that point, the core planning team will meet and make all changes necessary and present an updated document to the Public Safety Commission and the West Hollywood City Council. In addition, the Public Safety Division will informally involve members of the public as well through presentations at neighborhood meetings, key informant interviews, public meetings, and existing public safety programs. The Public Safety Division will also take the lead on submitting the City's updated plan to FEMA during the five year review process. Even though public hearings will be held during the annual review, a special public hearing will be held by the Public Safety Commission to illicit public input. This meeting will be widely advertised and open to residents, property owners, business owners, and other stake holders.

6.2 Implementation through Existing Programs

<p><i>IFR REQUIREMENT</i> §201.6(c)(4)(ii):</p>	<p>[The plan shall include a] process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans when appropriate.</p>
<p><i>Explanation:</i></p>	<p>Jurisdictions should indicate how mitigation recommendations will be integrated into job descriptions, comprehensive plans, capital improvement plans, zoning and building codes, site reviews, permitting, and other planning tools, where such tools are the appropriate vehicles for implementation. Communities that do not have a comprehensive plan, or other similar planning mechanisms, should explain how the mitigation recommendations would be implemented. Further, for certain mitigation actions that may use other means of implementation, these other tools should be described.</p>

6.2 Implementation through Existing Programs

Mitigation strategies are regularly reviewed through the City's existing programs, including General Plan review and updates, building and safety code review and updates, transportation and public works projects, commercial and residential code compliance, housing authority programs, capital improvement plans and projects, and emergency plan updates.

Since funding is limited, not all mitigation strategies will be possible soon. A chart of mitigation strategies will be reviewed by staff at regular intervals in order to identify funding and to incorporate work into other City projects when possible. For example, the Hazard Mitigation Planning team will work together during the City's budget process, capital improvement project planning, and other areas as appropriate to incorporate mitigation projects. Commercial and Residential Code Compliance, with assistance from the Planning and Building and Safety Divisions, will look for ways to strengthen the Municipal Code and other laws to support the City's mitigation strategies. In addition, there are several public meetings which will be used to encourage both public and private input and to adopt or incorporate mitigation projects into community outreach.

Please see the chart on the following page for a summary of the City's Existing Programs and the possibilities they provide for mitigation strategy incorporation.

Local Planning Mechanisms	Issues Addressed	Responsible Department	Time Frame	Possibility for Mitigation Strategy Incorporation
General Plan	Identifies Hazards and Impact, Land Use, Vehicular Transportation, Housing, Environmental	Community Development	Review in progress	Examine Plan for Ways to Incorporate Mitigation Strategies
Planning Commission Meetings	Land Use, Development	Community Development	Twice a month	Community Input
Public Safety Commission Meetings	Emergency Management, Hazard Identification	Public Safety	Once a month	Community Input
Emergency Plan	Identifies Hazards and Impact, Vulnerable Populations and Structures, Emergency Response Capabilities	Public Safety	Annual Review	Examine Plan for Ways to Incorporate Mitigation Strategies
Building and Safety Codes	Development, Construction Standards	Building and Safety	Every 3 years	Strengthen Code to Support Mitigation Strategies
Municipal Code	Identifies Hazards and Impact, Land Use, Vehicular Transportation, Housing, Environmental	Various Departments (Community Development, Administrative Services, etc.)	Updated as necessary	Strengthen Code to Support Mitigation Strategies
Commercial Code Compliance	Zoning, Encroachment	Commercial Code Compliance	Updated as necessary	Enforce Code
Residential Code Compliance	Property Maintenance Standards	Residential Code Compliance	Updated as necessary	Enforce Code
Fire Department Building Inspections	Fire and Life Safety	Fire Department	Annual Inspections	Enforce Code

Mitigation Strategies Overview Chart

Hazard	Mitigation Strategy	Responsible Department	Time Line	Plan Goals Addressed				
				1. Ensure Effective Response	2. Promote Response & Recovery via Preparedness	3. Reduce Impact of Hazard	4. Maximize Resources	5. Increase Public Awareness
Multi-Hazard	1. Public Education Campaign Conduct extensive outreach to the community regarding hazard	Public Safety & Public Information	2006					
Multi-Hazard	2 Traffic Signal - Battery Back-up Improve response and recovery to emergencies by providing battery back-up for traffic signals at major intersections	Transportation & Public Works						
Multi-Hazard	3. WH Auditorium Generator Installation Equip the primary shelter location with a generator	Facilities	2005					
Multi-Hazard	4. Update the General Plan ?	Planning						
Multi-Hazard	5. Employee Emergency Notification System Utilize an automated notification system to recall and inform employees and leaders in the community of emergencies.	Public Safety & Public Information	2005					
Multi-Hazard	6. Strengthen Evacuation Plans for Existing City Facilities Work with all staff at City Facilities to reinforce proper evacuation procedures	Public Safety	2006					
Multi-Hazard	7. Business Community Awareness Program Conduct extensive outreach to the business community regarding hazard mitigation.	Public Safety & Public Information	2007					